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THE ASIATIC REVIEW

JANUARY 1945

PROCEEDINGS OF THE EAST INDIA ASSOCIATION

INDIA'S FIGHTING SERVICES IN THE WAR

THE opening meeting of the autumn session of the East India Association, held at the Rooms of the Royal Society, Burlington House, on October 3, 1944, took an unusual form. In place of a lecture followed by discussion there were three short papers read by officers, each of whom represented one of the fighting services of India.

Field-Marshal Sir Philip Chetwode presided, and called upon Lieut.-General G. N. Molesworth to introduce the speakers.

LIEUT.-GENERAL MOLESWORTH said: The Prime Minister recently told the House of Commons that, at the last Conference at Quebec, he had made it clear that the British Empire would take its full share in the final defeat of Japan.

Operations to achieve that end are already in progress on the Indo-Burma frontier, and in those operations India's fighting forces are already taking a lion's share. Our object today is to try and give you some idea of what India's fighting men are doing from the lips of three officers—representing the three fighting services—who have personal knowledge and experience of those men. The personal touch is worth mountains of addresses, articles and books at second hand, and we are fortunate today in having present three officers with first hand knowledge.

The first speaker is Commodore J. T. S. Hall, C.B.E., of the Royal Indian Navy. He served for seven years in the Royal Navy and after seeing service in the Dardanelles and North Russia transferred to the R.I.N.—then the Royal Indian Marine—in 1921. He has had much sea service in His Majesty's Indian ships, and has commanded *Baluchi*, *Chive* and *Cornwallis*. A staff graduate of the Royal Naval College, Greenwich, he has been concerned with naval operations and plans for some years, and before coming to the India Office as Senior Naval Staff Officer was Chief of Staff to the Flag Officer R.I.N. There are few officers who are better qualified to speak with knowledge and authority on the Royal Indian Navy.

The second is Major Sarabjit Singh Kalha, D.S.O. of the 1st Punjab Regiment, a regiment which heads the list of Indian infantry regiments, and recruits Punjabi Mussalmans, Sikhs, Rajputs and Hazarawals—all famous fighting stock. He came into the Indian Army through the Indian Military Academy. Before this war he saw active service on the North West Frontier and as he will tell you, has commanded his battalion in battle on the Burma front. He is now a student at the Staff College, Camberley.

The last speaker is Squadron-Leader K. K. Majumdar, D.F.C., of the Indian Air Force. I am most grateful to him for coming and to the Air Ministry for releasing him for a few hours from an operational tour. He was trained at Cranwell and commissioned in the R.A.F. in 1933. In June, 1941, he was commanding No. 1 Squadron, I.A.F., and took it to Burma in the dark days of January, 1942. The squadron was then equipped with slow ~~and obsolete~~ ^{Blinder} ~~biplanes~~ ^{biplanes}, whose main rôle was reconnaissance. But it used both ~~guns and bombs~~ ^{guns and bombs} against the Japanese with

great effect, and made a great name for itself. Squadron-Leader Majumdar gained the D.F.C. in these operations. Subsequently he was on the air staff at New Delhi as Wing-Commander, and had much to do with the expansion and organization of the Indian Air Force. He relinquished his rank to come home and be attached to the R.A.F. to obtain experience of modern aircraft. He joined a fighter reconnaissance squadron on the evening before D day, and since then has seen service throughout the northern European fighting—at the beachheads, at Falaise-Arentan, at the crossing of the Seine and the battles in Holland. We are fortunate to catch him before he returns to India to an operational appointment and India will be lucky to get him.

Finally, in order to strengthen the personal element of today's proceedings, I would like to introduce to you three Viceroy's commissioned officers of the Indian Army, who have all seen active service in this war.

Firstly Risaldar Sisram of the Central India Horse (Indian Armoured Corps). He is a Jat, from the Rohtak district of the Punjab and has 24 years' distinguished service. He fought in Libya in 1940 and 1941. He wears the Indian Distinguished Service Medal and the African Star.

Secondly Subedar Munsibdar Khan of the 13th Frontier Force Rifles. He is a Janjua Rajput from Rawalpindi district of the Punjab. His service is 26½ years. He fought in Waziristan in 1930 and in Burma in the present war. He wears the I.D.S.M., the Indian General Service Medal, the 39-43 Star and the Coronation Medal.

Thirdly Subedar Khark Bahadur Gurung of the 6th Gurkha Rifles. He is a Gurkha from Western Nepal, and has 28 years' service. He fought in the Great War 1914-18, has seen service in Waziristan, but owing to his age has not seen active service in this war. He wears the Order of British India, the General Service Victory Indian General Service and jubilee medals and has a mention in despatches to his credit.

The following papers were then read:

THE ROYAL INDIAN NAVY

By COMMODORE JOHN T. S. HALL, C.B., R.N.

I have been asked to give you a brief description of the progress and development of the Royal Indian Navy during the war.

Naturally in such a conflict the part played by the smaller units of the Allied naval power does not come into the limelight very much; nevertheless the Royal Indian Navy has done a lot of useful work in her home waters, even if a great deal of it has not been very spectacular. This was recognized recently and the Royal Indian Navy was accorded a signal honour when H.M. the King visited His Majesty's Indian ship *Godavari*—then serving with the Home Fleet.

I should like to mention the chain of command. As you are aware, major naval strategy in the Eastern theatre comes under the Supreme Allied Commander South East Asia. Naval operations are directed by the Commander-in-Chief Eastern Fleet, who also exercises operational control of escorts in the Indian Ocean.

The Flag Officer Commanding the Royal Indian Navy, under the Commander-in-Chief India, administers the Royal Indian Navy and is responsible for the coast of India, naval defence of the major ports and coastal anti-submarine escorts. The R.I.N. provides approximately half the ocean escorts and about the same proportion of coastal forces in the Eastern theatre.

Administration of the Royal Indian Navy is exercised from Naval Headquarters at New Delhi through the Flag Officer Bombay on the west coast, and Commodore Bay of Bengal on the east coast, and the Naval Officers-in-Charge at major ports. The Headquarters Staff is adequate to administer the existing Indian Navy and any expansion at present contemplated.

The Flag Officer Bombay and Commodore Bay of Bengal are responsible to the

Flag Officer Commanding Royal Indian Navy for the west and east coasts of India, excluding Ceylon, and have the necessary staff to maintain the efficiency of ships based on the ports in their respective Commands, and, under the orders of the Commander-in-Chief Eastern Fleet, to operate the ocean escorts. Naval Officers-in-Charge are responsible for their respective ports and for anti-submarine escorts in adjacent coastal waters. In Ceylon, which of course does not come under India, there is a Flag Officer directly responsible to the Commander-in-Chief Eastern Fleet.

The Royal Indian Navy comprises escort vessels, fleet minesweepers, trawlers, auxiliary vessels, coastal craft and landing craft. The fleet minesweepers and trawlers are dual purpose vessels fitted for both anti-submarine and minesweeping duties. For obvious reasons it is not possible to give detailed figures, but on completion of the New Construction Programme the force will be adequate to meet its present tasks.

Most of the smaller ships were built in India, though the sloops were built in the United Kingdom. Some of the fleet minesweepers were constructed in Australia, some in the United Kingdom, and others are being built in India. When the threat of attack by the Japanese Fleet was greater than it is now, a number of motor torpedo craft were provided as an offensive weapon for defensive operations. The importance of these craft has been considerably reduced due to the improved strategic situation.

The personnel of the Royal Indian Navy has been increased to nearly twenty times its pre war strength. The officers are approximately 50 per cent European and 50 per cent Indian—ratings are 100 per cent Indian. Recruitment is on an all India basis, and up to the present has been fairly satisfactory, though there is still difficulty in obtaining higher technical ratings, whose training is a lengthy process.

It will be appreciated that recruitment in India is still on a voluntary basis and that for modern ships a relatively high standard of basic education is necessary to enable the ratings to assimilate the advanced technical training now demanded of all branches of the Service. Our training policy during the past year has been to consolidate after the very rapid expansion of the first four years of the war. Like all other Services, the Royal Indian Navy has suffered from growing pains, the large increase having resulted in a relatively low proportion of experienced personnel. War expansion has been met by formation of reserves of officers and entry of special service ratings for non-continuous service.

The Training Establishments are now working double tides to make good deficiencies in training during the early years, qualifying men in specialized subjects to provide for increase in higher non-substantive rates and training ratings for substantive promotion. The Training Establishments have been modernized and brought up to date, and new schools have been set up.

We have two Boys Training Establishments at Karachi where boy recruits are entered at 15½ to 16½ years of age. A Mechanical training establishment has been built near Bombay, where artificer and artisan apprentices are trained. Engine-room ratings undergo mechanics courses and artificers and artisans undertake advance ment courses to qualify for higher rating.

There is a Seamen's Training Establishment at Bombay where special service seamen are given preliminary instruction before going to sea to complete their training. There are also Gunnery, Torpedo, Communications and Anti-Submarine Schools where ratings are given specialized training in the various branches of the Service.

Coastal Force and Combined Operations training centres have been established for these special lines. Last, but by no means least, there is a Junior Officers School where all Reserve Officers undergo courses on joining the R.I.N. Altogether there are 14 Training Establishments, which accommodate about 4,000 men undergoing courses. Training facilities are also afforded to ratings of the Royal Navy serving in the Eastern theatre.

Since the outbreak of hostilities His Majesty's Indian ships have been actively engaged in most theatres of war other than the Pacific. During the early days ships of the Royal Indian Navy served in the Red Sea and Persian Gulf. They have also served in the Atlantic and in the Mediterranean during the invasion of Sicily, but naturally their main theatre of operations has been the Indian Ocean.

In the Red Sea ships of the Royal Indian Navy took part, with His Majesty's

ships, in the operations against Italian possessions in East Africa. They had their full share of patrols and minesweeping and one of His Majesty's Indian ships was the first to enter Massawa, the main Italian base in East Africa.

In the Persian Gulf His Majesty's Indian ships working with ships of the Royal and Royal Australian Navies took part in the capture of a number of German and Italian ships at Bandar Shapur, and in other operations in that area.

When Japan entered the war sloop of the Royal Indian Navy were engaged in the Java seas. His Majesty's Indian ships *Jumna* and *Sudley* gave a good account of themselves. The former brought down a number of Japanese aircraft, and is believed to have been the last Allied ship to leave Batavia. His Majesty's Indian ship *Bengal's* action with two Japanese raiders while on her maiden voyage from Australia to India escorting the Dutch tanker *Ondina* in November, 1942, will be readily recalled. In this spirited action the larger raider, estimated to be 10,000 tons and comparatively heavily armed with a broadside of four 4.7-inch or 5-inch guns, was set on fire and sunk. The second raider broke off the engagement. *Bengal* got off remarkably lightly, and *Ondina* was able to make port under her own steam though severely damaged by gunfire and torpedoes. The Commanding Officer of H.M.I.S. *Bengal* was awarded the D.S.O. and several lesser awards were made to her officers and men.

Coastal forces, including units of the landing craft wing have been actively engaged in operations with the 14th Army on the Burma coast. They made numerous attacks on the enemy's lines of communications and did useful work in many local actions.

I hope from the foregoing remarks you have been able to get a fairly good outline of the Royal Indian Navy—what it has done and what it is doing. I am not at liberty to say much about the future but I trust that we shall avoid the mistake made after the last world war of cutting down the sea services far below the strength necessary for the security of our ocean lines of communication and that the Royal Indian Navy will go on from strength to strength as an efficient unit of the Empire Naval Forces.

THE INDIAN ARMY

BY MAJOR SARABJIT SINGH KALHA D.S.O. 1ST PUNJAB REGIMENT

I feel myself to be indeed honoured in being asked to address so distinguished a gathering. To court praise and honour is very contrary to the oldest and best traditions not only of the Army but of the whole structure of civilized life. Nevertheless *this is an age of publicity and of news, and the ideas and views of the ordinary man* of any country are almost wholly governed by what he reads in his newspapers. And in order to try to ensure that that ordinary man obtains a fair picture of world events, and of the men who shape those events it is often necessary for someone even so humble an individual as myself to write or talk of personal experiences, or at any rate, of the experiences of men with whom he has been intimately associated. And that is my excuse for talking today about what is to me a very personal subject—the Indian Army.

In the five years of war that have passed the Indian Army has played a great part. The gallant actions fought by the 4th, 5th and 10th Indian Divisions in the Middle East and in Eritrea and Abyssinia, their part in the final crushing of the Axis forces in North Africa has been widely publicized. And I am sure that you all have some idea of the doings of the 4th, 8th and 10th Indian Divisions in Italy where at this moment they are helping to smash the Germans.

But there is another war going on—against those other enemies of justice and decency the Japanese. And fighting them on the Burma front is the 14th Army. And the achievements of that Army have never had the recognition that was their due, neither in this country nor in the U.S.A. This is, to a certain extent, understandable, for Kohima and Imphal are a very long way from London and there are the most stirring events going on very much nearer England. The 14th Army are every bit as much fighting your battles as are our magnificent Allied armies in

Europe and the bulk of that 14th Army (approximately 70 per cent. of its total strength) is Indian.

It must be borne in mind that every man now serving in the Indian Army is a volunteer and does not serve under any scheme of National Registration. Contrary to some recent remarks that have been made on the subject in other parts of the world it is *not* hunger or starvation which induces Indians to join the Army but a tradition, a desire for martial service and the wish to be a man of standing in his village—a soldier in the service of His Majesty the King Emperor. Almost all the men in the fighting arms are from the agricultural class which grows its own food. The parts of India which have recently been struck by such disastrous famines contribute only a comparatively small number to the fighting services. With the rising of prices during the war the man in the village has, generally speaking, done well so has the man in industry. But the basic pay of the sepoy is still only 18 rupees a month and this in itself is no very great inducement.

Some figures illustrating the expansion of the Indian Army during the war are of interest. In August, 1939, the strength was 182,000. In July, 1944, it was just on 2,000,000. This vast increase in recruitment has led to the abolition of the old idea of martial and non martial classes and men are now drawn from all over India and not from a few selected areas and classes. India, my country, has produced in this war the largest volunteer army that the world has ever seen. And to suggest, as has been done recently by persons in the U.S.A. who are grossly ignorant on the subject that such an army is a purely mercenary one is a calumny of the vilest sort. They have volunteered to fight for their country and their King Emperor.

In considering the Indian Army today we must not forget the officer cadre. From 1922 approximately 3 to 10 Indians were selected half yearly through an open competition or by nomination for training at the Royal Military College Sandhurst. They attended an eighteen months' course there and were then attached for one year to British battalions in India before being posted to certain infantry and cavalry units of the Indian Army which had been earmarked for Indianization. With few exceptions all these cadets came from well-to-do Indian families and each cadet, on the average, spent from £700 to £1,000 during his stay in England. Obviously all parents whose sons become officers in British or Indian Armies cannot afford such a sum.

In 1932 when our Chairman today was the Commander in Chief in India, an extremely important step was taken, the opening of the Indian Military Academy at Dehra Dun, the Indian counterpart of Sandhurst. It was situated in fine modern buildings amidst surroundings ideal for training. A very able officer, Brigadier Collins, was appointed as the first Commandant, and he was given a first-class team of instructors and staff. The Academy thus got off to a real good start. I was one of the earliest to pass through, and the learning and the training that I assimilated there has been of the utmost value to me in the past years, and will, I am certain, continue to be so as long as I live.

Until 1940 officers graduating from the Indian Military Academy were still only posted to certain selected units, units which had been earmarked for Indianization—that is to say that no more British officers were to be posted to them, only Indians. But early in 1940 Indianization of the officer was extended to all units, an extremely important step. For now, British and Indian, we all work together in every unit and sub-unit of the Army and all get an equal chance of command in active operations. When the war broke out there were just on 400 Indians holding the King's Commission; now there are nearly 11,000.

All of you must have heard something about the Indian Divisions in East Africa, Middle East, Tunisia, Syria, and latterly in Italy. I sincerely hope that you have, for their exploits are amongst the most glorious in the whole history of the Indian Army. But for today they are outside the scope of my talk. Today I want to talk about the 14th Army on the Burma front for two reasons. In the first place it is because as I have already told you that Army is predominantly Indian and secondly, because it is the part of the world with which I am most familiar personally.

The record of the 17th Indian Division on this front can hardly be bettered. They were in Burma in 1942, and since then they have been engaged in the front line for

twenty-seven continuous months without a break. I did not actually serve with them, but I know them personally and I know what they have been through. And no words of mine could adequately describe it.

My battalion went up to the Arakan front with the 14th Indian Division. I, myself, was second-in-command at the time and then subsequently I had the privilege of commanding them for about two months. With heavy odds against us, our men repeatedly put in magnificent attacks and we took the first two Japanese prisoners ever to be taken alive by any British forces. This was on February 2, 1944.

The exploits of Havildar Parkash Singh v c, are an example of what our men did. He was second-in-command of a carrier platoon and though wounded three times, he went out ahead of our lines in a carrier to within sixty yards of the Japanese positions to rescue one wounded British officer and two comrades from a burning carrier. He then went out again and towed to safety another of our carriers which had broken down. To do this he had to jump out of his carrier amidst a positive hail of machine gun bullets and grenades, fix on a tow-chain to the one that was disabled, climb back into his own carrier and then drive back.

Major Budh Singh, m c and Bar is another fine fighter. He won his M C and Bar within a space of about three weeks the shortest space of time ever for the collection of two such decorations.

To begin with, in our fight to prevent the Japanese invading India things did not go too well for us. We were badly outnumbered and painfully short of equipment owing to the pressing demands of other theatres of war. But since the formation of S F A C we have gradually gained mastery in the air and on the ground and have inflicted two crushing defeats on the Japanese killing some fifty to sixty thousand of them. And their morale has been badly shaken.

However before that happened there were certainly one or two anxious periods. In February 1942, my battalion was still on the Arakan front with the 5th Indian Division in the Maungdaw area. The 7th Indian Division at that time was in the Buthidaung area. The Japanese by a very swift encircling movement completely surrounded the 7th and very nearly did the same to us and Tokio announced to the world that another great victory had been won and the road to India was open. But they spoke too soon. We stayed where we were and lifted our lines of supply into the air. The British Indian and American Air Forces never failed to get our supplies through to us, and did a magnificent job of work. After about twelve days of this stalemate we started offensive action in earnest and my battalion was given the task of opening up the Ngakyedauk Pass again the line of communication between the 5th and 7th Indian Divisions. We left our mules and jeeps behind and humphd every ounce of our equipment. We encircled the Japs appearing from totally unexpected quarters and thoroughly beat the little swine at his own game and within forty-eight hours the pass was opened again. My battalion together with a company of a Rajput regiment suffered a total of five casualties in this operation and we killed or put to flight over 500 Japanese.

In March, the Japanese invaded India with over three divisions by way of Kohima and Imphal in order to cut the Bengal Assam railway which was the main supply route to General Stilwell's forces in the north. They succeeded in surrounding Kohima and Imphal though they never captured either place and we of the 5th Indian Division were flown up a complete division from the Arakan front to help. Within forty-eight hours of leaving the Arakan we were in action on the Manipur front and were fighting the Jap Guards Division who had played an important part in the capture of Singapore. The complete thrashing that the Japanese took in Manipur is now history and they are still running at this very moment. Few retreats in all history can equal the utter rout of the Imperial Japanese Army in this epic victory.

We of India are proud of our 14th Army. We call it our Army justifiably. I think because the bulk of it is comprised of our own countrymen. But we do not and cannot forget what we owe to the British. They are there with us, shoulder to shoulder the men of this little island. Perhaps your son or brother your husband is one of them one of those comrades in arms of my countrymen helping to defend my country against the invader. And above all this we Indians of the Indian Army

realize that our Army is the creation of the British, that still the greater proportion of its officers are British, and that all that we know, all that we have learnt about the art of leading and commanding men, all our traditions are yours. I can say with pride that we have been worthy of those traditions, and if I can presume to speak on behalf of my brother Indians in the Army I say that we always will be. For you have shown us the way.

THE INDIAN AIR FORCE

By SQUADRON LEADER K. K. MAJUMDAR D.F.C.

India's Air Force is a new and young service. It grew, as an experiment, out of the general scheme for Indianization of the fighting services. Formed in 1933 it consisted, at the outbreak of war, of a single squadron with 13 officers and 260 air men. It was equipped with Wapiti and Hart aircraft—out of date even in those days.

The Indian Air Force now is over 20,000 strong and supplies one fifth of the personnel in the South East Asia Air Command. There are 10 operational squadrons and behind them a full complement of maintenance and training units. Apart from this increase in size the Indian Air Force has been supplied with, and fully trained in the use of modern aircraft and equipment to the same fine standards as the Royal Air Force.

From the very start special problems arose in building an Indian Air Force. The greatest of these was the supply of other ranks. Although India had magnificent soldiers, men of their type were not suitable material for the technical responsibilities of an Air Force on account of their lack of education. After many experiments it was found that the only solution was to recruit men sufficiently educated to be capable of absorbing technical instruction in English. English is thus the official language of the Indian Air Force. This decision has not only simplified training and technical administration, it has also made it extremely simple for the Indian Air Force to work hand in glove with the Royal Air Force, the Dominion Air Forces and the Americans. This is very necessary because of the rapidity with which aeroplanes move over great distances.

The I.A.F. is entirely Indian in composition. If we seek assistance from British personnel they remain in the Royal Air Force and are merely posted to us. Any Indian can join the Indian Air Force without restriction of class or caste. The men all live and eat together in the same messes without religious distinctions. The service is drawn from all over India. The actual representation in it by communities and provinces works out roughly in proportion to their relative populations. It is very inspiring to see the success of this mixing and the way in which these men are settling down. Their spirit is best typified in the words of the motto of No. 1 (Indian) Squadron: *Ittehad men saki hai* (In unity there is strength).

As in all of India's fighting services, recruitment is entirely voluntary and the expansion I have mentioned has been on that basis. The I.A.F. is trained on exactly the same lines and up to the same standards as the R.A.F. and those of the Dominions. A vast training organization, both for mechanics and pilots, has been built up in India. Over and above this a certain number of Indian pilots are also trained in Canada under the Empire Air Training Scheme, and subsequently given a tour of operations with the R.A.F. in Europe. This is done to widen the basis of experience among our officers.

The work of the I.A.F. is fully integrated with the R.A.F. Units and individuals are fully interchangeable because of the common language and training. Our feeling towards the R.A.F. goes very much deeper than just fraternization. From the beginning we have been dependent on them for nearly everything and there is a very strong sense among us of being one with the R.A.F.

Since the start of the war Indian Air Force squadrons have slowly taken over full responsibility for air commitments on the North West Frontier. We now meet these requirements entirely on our own, and have thus relieved several R.A.F. squadrons for duties elsewhere.

In the early days of the war hastily formed Indian Air Force Volunteer Reserve units, equipped with whatever aircraft were available at the time, commenced coastal

co-operation duties with the Royal Indian Navy. These units carried on until 1942, when they handed over to a properly organized R.A.F. coastal air force, and were themselves absorbed into the regular Indian Air Force.

As soon as the war with Japan broke out an Indian Air Force squadron was sent to fight in Burma. I had the privilege of commanding this squadron. It was a great moment for all of us, as it was the first time the Indian Air Force was taking part in a major war, and also because it was the first completely Indian squadron. We were equipped with Lysander aircraft, and employed partly on close support bombing and partly on reconnaissance. Many of the air crews had exciting adventures and narrow escapes. What was most impressive, however, was the way in which the ground staff worked under very difficult conditions and intense bombing to keep the aeroplanes flying. Many of these lads came from homes where military service had never been thought of before. A lot of them would in normal times have been clerks or small tradesmen. Yet they behaved under fire like veterans. There were of course also a number of men among them with more martial traditions. The camp followers were amusing. We had recruited them on the Frontier before leaving India, and very tough they were. I had at the back of my mind the idea that they would be useful if there was any fighting on the airfields. They were unmoved by Japanese bombing and maintained that it was not much different from our own on the Frontier. When we finally left Burma we had the very great honour of being thanked by Lord Wavell in person.

Since then several Indian Air Force squadrons have fought the Japanese successfully. There are now a number of them operating very effectively in the Arakan and on the Tiddim Road. It has been Indian squadrons which have provided the Army with its air reconnaissance during the recent fighting in both those areas. Their duties have also included dive bombing, tactical and photographic reconnaissance, strafing, and numerous secret and delicate operational missions ranging from dropping medical supplies to delivering official instructions to Army units surrounded by the enemy. Several Indian pilots have distinguished themselves and been decorated for gallantry. A case in point is that of Squadron Leader Mchar Singh. This officer was recently awarded the Distinguished Service Order. In the words of the official citation: "This officer commands an Indian Air Force squadron which does tactical reconnaissance on the Arakan front. The spirit and skill of his pilots are of exceptionally high order due to the fine leadership and high example set by Squadron Leader Mchar Singh himself. In just under three months he has successfully completed eighty-two operational sorties in Arakan. It is worthy of note that this squadron's flying personnel from Squadron Leader Mchar Singh downwards is 100 per cent Indian. What is still more encouraging is the way that all ranks have done their job and kept the whole complicated machinery of an Air Force working smoothly and efficiently."

I have just had the great privilege of doing a tour of operations over Europe with a squadron of the 2nd Tactical Air Force. The squadron I was in contained a number of pilots from all the Dominions as is usual in the R.A.F. It was brought home to me more strongly than ever what a brotherhood exists between airmen. By flying together and fighting together one learns more about each other than one can ever learn any other way. The Indian Air Force has already taken its stand with the other Air Forces of the Commonwealth.

Our brotherhood is one—a brotherhood of the air—and if I may presume to speak on behalf of the Indian Air Force I know that all of us would wish it always to be so.

DISCUSSION ON THE FOREGOING PAPERS

A MEETING of the Association was held on Tuesday, October 3, 1944, at the rooms of the Royal Society, Burlington House, Piccadilly, W. 1. Field Marshal Sir PHILIP CHETWODE, OM, GCB, GCSI, KCMG, DSO, presided.

After the three papers had been read and warmly applauded, the CHAIRMAN

said that the addresses were of particular interest to him for, as ex-Chief of Staff and Commander in Chief in India, he had been very closely concerned with some of the vital reforms in the three Services and it was gratifying to know that these reforms had done everything which he had hoped.

With regard to the Navy, one important change took place when Admiral Sir Humphrey Walwyn was in command when he wished to recruit lower deck hands. He asked if he might recruit in the Punjab, and the speaker told him that a Punjabi had never seen water except a river or a tank but a few were recruited and they took to the water like ducks! As the Punjabi, in addition, was a fighting man, he made an ideal deck hand, and the speaker had never known a Punjabi let anyone down.

There was another very important occasion in which he took part when His Majesty made the Indian Navy the Royal Indian Navy and he had the pleasure of hoisting the first White Ensign over the Indian Navy Headquarters in Bombay.

Every speaker had said that the difficulty was still in education and that it was difficult to find men for the mechanical side but the enormous industrial development in India would remedy this, he thought, in a very short space of time.

The Indian Sandhurst was inaugurated while he was Commander in Chief and its establishment had been fully justified. If an independent India was aimed at, the sooner the Army was Indianized the better. The Indian Army had been enormously increased, and was now the biggest voluntary Army in the history of the world. The splendid performance of the 4th, 5th and 10th Divisions in the Middle East was well known. There had not been a finer performance in the war than that of the 4th Division at Keren in Abyssinia but the performance of the Indian Army fighting in Burma with the 14th Army had not had anything like the publicity which it deserved.

The most hostile critics of the British in India and the Indian Army should hide their heads now that they knew that India had raised a purely voluntary Army of no less than three million men. That was the best answer to such critics.

He was Commander in Chief when the first Indian Air Squadron was started, 13 officers and 260 men. Now the Indian Air Force was a very large one. The Indians at once showed themselves to be natural fliers but again they suffered from lack of education and difficulty in finding mechanics and mechanical instructors for ground service and maintenance. The vast majority of Indians, however, were natural mechanics and that was soon remedied.

One big thing that the war had taught was that if modern warfare was to be successful there must be close and intimate co-operation between all three Services. Every one of our big victories had been won by the Army, Navy and Air Force working together and there must not be any of the stupid jealousy which had been a stumbling block in the past. Each Service must retain its own identity but it was essential not only in war but in peace that there should be a central common planning and a general staff to prepare for war and to carry out war.

SIR WILLIAM BARTON said that it had been a great privilege to hear at first hand something of the doings of the Indian Army and Indian fighting men from their own leaders. He served 20 years ago on the Afghan frontier in close association with the Frontier Force and other Indian Army units and from the opinion he formed then of the fighting qualities of the Indian soldier he was not surprised that the Indian Army had stood up so splendidly to the strain of modern mechanized war. He sometimes thought that people in this country in America and in India did not realize how much they owed to the small professional Indian Army which was in existence in 1940 an Army of barely 150,000 men. If that Army had been disloyal it was practically certain that the Japanese would have plunged at once into the war, they would have overrun India, swept across Afghanistan and Persia and joined hands with the Germans in the Persian oil fields. The Russians could hardly have held the German attack in the Caucasus if they were being smashed from behind by Japanese forces. We should certainly have lost Egypt, and would have had to leave the Mediterranean all we could have hoped for would have been a negotiated peace which would have left the Far Eastern and Middle Eastern countries at the mercy of Japan.

But the Indian Army was loyal, devoted to India and to the King Emperor and with its strong support the Italians were swept out of Abyssinia, Egypt was held

Syria and Persia occupied and the oilfields denied to the Germans. One almost felt that the words used by the Prime Minister in his classic tribute to the R.A.F. in the Battle of Britain might be used to describe the record of that small Indian professional Army. Perhaps some day many of the thousand million people who had benefited from its splendid work would realize what they owed to it.

What was India going to do to show its gratitude to the survivors of the Indian professional Army and the great Armies which that professional Army had helped to train and inspire with its own tradition? The Indian Government was preparing vast schemes to deal with the problem of demobilization and a large sum of money was being collected by way of deferred pay. One wondered whether it would be enough. The Indian Army was a peasant Army, land was very scarce and millions of Indians had lost their smallholdings to the moneylenders. What the peasant soldier would want when he retired was land, but it was said that there was very little available. Was this really true? The Indian Government had schemes for extending irrigation of over 10 million acres, could they not buy up some of this un-irrigated land and make it available for returned soldiers? There were 150 million acres of waste land which could be made cultivable. To bring most of that land under the plough was part of the scheme of the Indian Government. Could not that Government buy up say 12 million acres and promise to give it to the Indian sepoys in a couple of years when it had been made fit for cultivation? Much of it had been damaged by erosion, flood, water channels, much of it was scrub covered and much work was needed to be done on it, but a gesture of the kind would be much appreciated.

Much of the land owned by Indian peasant soldiers had been mortgaged to money-lenders, could not the Government of India offer to redeem those mortgages? Would not such an announcement act as an electric shock from one end of India to the other? Again, was there not a possibility of a colonization scheme overseas for the Indian soldier? The British Colonial Empire comprised thousands of square miles of country waiting to be developed. There were 300,000 square miles in New Guinea, 50,000 in Borneo, 100,000 in British Guiana, where there were already a quarter of a million Indians who would welcome newcomers. West Indian authorities might object surely there was room enough for Indians both from west and east.

The Indian soldier when he returned to his village would have a very different outlook on life than when he left it. Those who had read that excellent little pamphlet issued by the Indian Government *Swords and Ploughshares* would realize how much was being done to fit the Indian soldier for mechanized warfare and to give him some idea of what he was fighting for. Lieut. Colonel Sir Sher Muhammad Khan had told us that the Indian soldier would insist on having a voice in politics when he returned. The speaker was not quite sure whether under the Cripps offer the Indian soldier would have an adequate voice in electing the Constituent Assembly that was to settle the problems of India; it was up to the Government of India to see that he had.

One might ask how such a scheme as he had attempted to outline would be received by political India. The Nationalists would say that it was an attempt to sidetrack the political problem; an adequate retort was that a Government had to be set up which would be acceptable to everyone, including the minorities; such a Government could take the scheme over as it stood at the time and do as they liked with it. He was quite sure that a National Government worth the name would give with both hands to the man whose valour and devotion had made the existence of such a Government possible.

Major JAMES LUNT said that he had just returned home after seven years' overseas service, the last eighteen months being spent as an instructor at the Indian Military Academy. That was a great honour as far as he was concerned because he was a British serving officer and greatly welcomed the opportunity to serve with the Indian Army in its home. He could claim to have had a large amount of connection with the Indian Army because his father had been an instructor there before him. I.M.A. had expanded enormously since the days before the war and when he left there were about 800 cadets under instruction of whom two thirds were Indian and one third were British and the British and Indian cadets served together, lived together, ate together and did everything together, and they got on amazingly well. The Com-

mandar-in-Chi I in a speech to the cadets, told them that there was no such thing as the British officer or the Indian officer in the Indian Army now, there were just officers. No institution in the Army, whether Kingston or Sandhurst, had done better than the I M A. one had only to see the Honours Boards in the Chetwode Hall to realize that.

There would probably be many changes after the war owing to the great expansion. The cadets had a nine months course, which was very stiff and there had been a very high wastage, but now that there was a selection board, as in the British Army the wastage had been much less, and about 75 per cent. of cadets were finally commissioned. They came from all over India and all did equally well.

SIR FREDERIC SACHSE said that he had played polo more than one season at Darjeeling with the father of Squadron Leader K. K. Majumdar and he often saw him as a schoolboy so he had a special reason for congratulating him on his record. He supposed that it would have been against disciplinary etiquette for the speakers to give any hint of what the rank and file of the Indian forces thought of the proposal to divide India into independent states. After the last war many people thought that the reforms were the reward for what India had done it seemed right and proper that after this war the Indian Service men should be given a strong voice in the future organization of the country. If a Constituent Assembly was called together the men who had fought for India and the ideals for which the democratic Allies were fighting should have a representation out of all proportion to their number. He did not think it would be possible to reward them by grants of land. It took more than two years to reclaim further lands by large scale irrigation schemes and it was very doubtful whether it would be economic. He would not like to see the people who had brought so much credit to India exiled to other colonies. The best reward was to give them a strong voice in the future government of the country.

DR RANJEE SHAHANI said that it had been realized in this war that friendship between nations was very important, especially between Britain and America on the one hand and the Commonwealth (including India) and America on the other. In order to achieve that friendship there had to be a certain amount of frankness but that by itself was not enough. Tact was necessary and a due regard for facts. Now some people seemed to think that they could say what they liked about us while it was our duty to be tactful. It was not quite fair. Wrong notions, no matter where they came from, had to be corrected.

As we knew, some foolish charges had been made against the Indian fighting forces. Well what was their record? They laid the foundations of victory by their deeds in the Western Desert they fought bravely in France and they were doing extremely well in Italy. As for Burma they had taught the Japanese what it was to invade India. The Indian Army was second to none in martial qualities. The Indian Navy and Air Force too had played their part magnificently.

It had been suggested that the Indian Army was mercenary. Was it? Of course the Indian soldier was paid, but as he was paid a fraction of what some Western comrades of his were paid—this ought to be remedied—he was perhaps less mercenary than many others who could be named. The truth was that Indians joined the Army because they liked to fight, because they were not going to let down the British and because they felt that having secured the triumph of democracy they were to share in its fruits. It was a matter of mixed motives—as all human actions were—but money played scarcely any part in it. He himself was a writer, but his ancestors were soldiers and there was still that element within him. In fact there were many Indians who took a soldier's view of life although they did not belong to military families. In a word there were as many Indians capable of bearing arms as anywhere else in the world, and proper training made Indians into first-class fighting men. It was not for him to say what should be done for the returning soldier. He should certainly have a voice in the destiny of India but a voice proportionate to his numbers and his accomplishments.

SIR SAMUEL RUNGANADHAN (High Commissioner for India) said that he had been thrilled by the accounts of personal experiences given by the three speakers, and the

story they had told of the growth in numbers and in fighting efficiency of India's forces must have stirred the imagination of all who heard it. The expansion of India's fighting forces in so remarkable a degree and within so short a time had been due as much to the organizing ability of the British and to their help given to India in the matter of equipment as to the eagerness and enthusiasm of the youth of India to respond to the call of duty and to their remarkable capacity for absorbing training and the technical knowledge of the West. All were interested to hear from Squadron Leader Majumdar that English was now the official language of the Indian Air Force. What a hope that held out for the future progress of such a Service both now and after the war!

All the speakers had emphasized that the Services were now open to all classes and sections of the Indian people and this mixing was bringing a tremendously unifying influence to bear upon the men in the Services and was also creating amongst them an all-India consciousness as against a sectional or provincial consciousness. It had also greatly improved the efficiency of the Indian Army as a whole apart from its old fighting tradition. A great part of a modern Army consisted of engineers (electrical and mechanical) and supply services, pioneers sappers miners, and so on and India's contribution under those heads had really been more widespread and vital to the war effort than was generally realized.

Units of the Indian Army Service Corps were at Dunkirk and had played a large part in getting supplies to Russia through the Persian Gulf. Indian pioneers played a great part in the construction of the railway across the Western Desert to Tobruk and Indian units had done and were doing a tremendous job of work on the Burmese front, building roads, constructing air fields and putting up other essential installations on the 700-mile Indo-Burma frontier. The progress of the Indian Army had been so remarkable that today there were more Indian troops fighting together in Italy than in any previous campaign in the West—namely the 4th 8th and 10th Indian divisions—while on the Burma front Indian troops constituted the bulk of the Commonwealth Army engaged in some of the most savage fighting of the whole war.

Major Sarabjit Singh Kalha referred with proper contempt to some disparaging remarks which had appeared in the press and elsewhere concerning the Indian troops and their morale. The only people competent to express an opinion were the men with whom the Indian troops were fighting and the men against whom they were fighting!

One of the outstanding facts of this war was the great comradeship which existed between British and Indian officers and between the rank and file of the two armies. All the speakers emphasized this comradeship in arms and such a comradeship such a brotherhood could only exist on a basis of mutual regard and of appreciation of one another's qualities and efforts in a common cause. When the history of the war came to be written it would be found that the fighting record of the Indian Army in every theatre of war in which the Army had had the privilege of taking part had not been less meritorious nor less gallant than that of any other Army of the United Nations.

He proposed a most cordial vote of thanks to the three speakers for their interesting papers, and also to the Chairman Field Marshal Sir Philip Chetwode whose great services to the Indian Army would ever be remembered.

The vote of thanks was accorded by applause and the CHAIRMAN made a brief acknowledgment on behalf of himself and the speakers.

SCIENCE AND INDUSTRIAL PROGRESS IN THE NEW INDIA

BY SIR SHANTI SWARUP BHATNAGAR, O B E , F R S

I AM deeply grateful to the East India Association for the honour they have conferred upon me by asking me to address them. I had some diffidence in accepting this invitation as I was informed that the membership of this Association was largely composed of princes, politicians and administrators. My fears were however soon allayed when I discovered that my old friend Professor A. V. Hill was to preside over my address. With the protection that the Chair provides to a speaker in democratic institutions I felt I could safely unburden my thoughts even before this distinguished assembly.

Professor Hill stoutly denies that he is a magician. Those of you who know the ways of the Government of India would be wondering how his proposals escaped subjection to the cold storage treatment which is applied to all proposals submitted to the Imperial Secretariat in New Delhi, the duration of the treatment being directly proportional to the degree of the novelty of the proposals concerned. Thus it is *nothing short of magic* that some of the progressive schemes which he suggested to the Government of India have been sanctioned within a few months. A department of Planning and Development has already come into existence and the choice of the Viceroy for this important portfolio has fallen upon Sir Ardesir Dalal who is acclaimed unanimously by leading business men and scientists as the man for the job.

The Government have not yet seen their way to adopt all that Professor Hill recommended but we live in hope. Scientific and Industrial Research activities are still scattered over various departments although a mechanism for co-ordinating these efforts is shortly expected to be introduced by the creation of a Scientific Consultative Committee at a high level. This will remove to some extent the disadvantages of the non-existence of a central organizing authority. There is no doubt that the short stay of a scientist has produced more lasting effects on Indo-British co-operation than have the good will missions of politicians. His Majesty's Government will advance the cause of our mutual relationship if they send a few more Englishmen of this kind to India.

BRITAIN AND INDIA

So far as we can foresee it seems certain that the future of Britain will be with those who can harness the country's hands and intellect to the production of wealth. There is little doubt that the scientists and technicians of this country by their quick and imaginative adaptability to new processes and new products will be able to maintain and extend England's reputation as an industrial country. In this planning for fresh scope and markets for British goods India is attracting the attention of British industrialists and politicians not only as a nation that will buy their products but also as a country which possesses vast and varied sources of raw materials.

I need hardly tell members of this Association that India is awake and critical as never before. A widespread feeling of suspicion exists that British policy in the past has permitted differential treatment and trade advantages to some foreign Powers to the disadvantage of India. This suspicion may have been exaggerated but it was based on certain facts. For example, in September 1937 an International Sugar Agreement was imposed on India by which she was prevented from exporting sugar by sea to any destination excepting Burma. There was a surplus of sugar in India and a shortage of it in the U.K. but His Majesty's Government preferred to purchase sugar from the Dutch East Indies and other countries all outside the sterling bloc even at heavy expenditure of foreign exchange. Besides, the Indians rightly or wrongly feel that economic disadvantages to India arising from laws of customs and

other legal and financial measures were a deliberate attempt to keep India industrially backward

These suspicions are unpleasant but they cannot be disregarded, they have to be mentioned in order to understand fully the genesis of the Indian trouble in this field. Such disadvantageous measures are being slowly withdrawn, but there should be a quicker method of establishing good will if the two countries have to work in close collaboration. Fortunately there are signs of the dawn of a new wisdom on the economic firmament, as it is becoming increasingly clear that no peoples, however undeveloped, can remain merely as wards of the developed nations. Far-sighted thinkers in the economic and industrial fields are now thoroughly opposed to the use of economic power to exploit or pauperize an undeveloped nation. Not only ethical principles, but even materialistic considerations have led to the view that the further a country progresses from economic poverty to material prosperity the more it will buy from others. No thinking man will doubt the soundness of this new idea as in essence it is the policy of live and let live.

In this world where distances are being annihilated and new sources of raw materials are being tapped and produced, such a principle is bound to be universally recognized as a great stabilizing force. India, too, will accept this if she is made a free and equal partner in the British Commonwealth, able to manage her own destiny without outside interference. A scientific approach to the future welfare of England and India lies in a final and honourable settlement between the two countries followed by an understanding that there will be trade and political agreement which will guarantee planned industrial progress for both.

I am among those Indians who want intimate friendship and intense co-operation with Britain. I am one of those who believe that such co-operation is the biggest hope for a fair future both for the East and the West. I can go further and say that there are still very many indeed in India who wish to remain friendly with Britain within the British Commonwealth. I agree however with Professor Hill that disaster lies ahead if India's industrial development and national welfare are not immediately attended to. Political controversies may take time to settle, but nobody will allow India's national welfare to suffer long. The scientists and the wise industrialists in India, England and other allied countries should co-operate to draw up a programme of work which will lead to planned progress and development.

AGRICULTURE VERSUS INDUSTRIAL DEVELOPMENT

People in India fear that while British industrialists may be interested in the development of Indian agriculture to any extent they are as a rule opposed to India's industrialization as she has in her the capacity and raw materials of an effective and potential competitor against England. If British industrialists have these views it would be wise for them to revise their ideas. It is obvious that any large scale programme of agricultural development should at the same time envisage a correspondingly large scale development of those industries which are intimately connected with agriculture. Of these power and fuel developments are the most important, because it is impossible to introduce new methods of increased agricultural production without power and the facilities for transport must exist if a full economic use is to be made of the results of our agricultural efforts. Only the other day, in an address before the Institute of Engineers (India) I presented detailed charts and diagrams proving what a large number of industries will be needed to maintain a high level of agricultural production. The subsidiary industries which depend on agricultural produce are also many and it is remarkable to find what a stupendous scope there is for the industrialization even by way of agricultural development.

What we need is a wise head on our shoulders and an army of trained scientists and technical workers who will take advantage of our by-products of agriculture and other raw materials. It is a matter of gratification that the Bombay Planners have been alive throughout to the need of keeping unchanged the agricultural character of our country. It must not be forgotten however that if 85 per cent of India's population are to live on agriculture this vocation alone, without help from other industries, will not be able to solve even its own problems and certainly not the problem of India's poverty. India must industrialize in other directions in order to

attract, say, some 25 to 30 per cent. more people than at present from agricultural pursuits. Amongst some immediate agricultural problems which face us may be mentioned

- 1 Increase in the production of the crops which are necessary for feeding the population
- 2 Readjustment of areas under cultivation for such commodities as cotton, oilseeds, jute, tea, coffee etc., according to the conditions of international trade during the post-war period
- 3 Increase in the size of agricultural holdings
- 4 Liquidation of the burden of agricultural indebtedness through the establishment of co-operative societies and rural banks
- 5 Eradication of the evils of soil erosion
- 6 Improvement in irrigation
- 7 Better rotation of crops
- 8 Use of better varieties of seeds.
- 9 Improved types of implements and manures
- 10 Protection against droughts and floods
- 11 Protection against insect pests
12. Better training of the agricultural workers

If these problems are to be solved India would have to develop immediately a large number of industries such as

- 1 Substitution of short staple cotton by long staple cotton and increased development of textile industry
- 2 Numerous industries for utilizing oilseeds and their by products. These industries run into hundreds in number
- 3 Fertilizers both inorganic and organic such as farmyard manure ammonium sulphate, superphosphates ammonium phosphates and ammonium nitrate, etc
- 4 Building and road materials
- 5 Transport facilities such as railways motor vehicles and producer gas plants

ELECTRIC POWER

It is abundantly clear that if India develops agriculturally she must do so industrially as well and the upper limits for the developments will be determined solely by the extent of her raw materials, the available technical talent and ability and such international obligations as may be agreed upon willingly in the interest of world or empire economy. It is therefore necessary to think out a wide planned programme of industrial development throughout the Commonwealth so that fear of intense strife and cut-throat competition may be as completely avoided as possible.

Perhaps the production of electric power *per capita* per annum is as safe a measure of the degree of industrialization capacity of a country as any single factor can be. The total output of electric power in some of the most developed countries of the world compared with India is given below

Country	Year	Energy per capita per Annum (Kw.H)
U.S.A	1939	880
U.S.S.R	1933	198 (nearly 600 in 1939)
U.K.	1937	500
India	1940	7
Brazil	1940	73
Argentina	1937	176

(*Journal of the Institution of Engineers (India)*, Vol 24 No 2, 1943.)

The figure of seven units for India is disheartening, but it assumes a different meaning when it is compared with the possibilities which India has. It has been estimated that the total hydro-electric power supply in India can be raised easily to

approximately twenty-seven million kilowatts, but half a million kilowatts only has been harnessed so far. These figures are indicative of a grand industrial future for India if we go about the job rationally. Besides the power factor we have natural resources and raw materials, and the Indian labour and technical men are eager to adapt themselves to new processes and new conditions.

QUANTITATIVE ESTIMATION OF NATIONAL WEALTH

The extent and quality of Indian raw materials have been much underestimated in the past. India's ability to supply goods may be judged from the vast amount of raw materials and finished products she has supplied during the war. When the country is scientifically surveyed there is no doubt that many sources in the animal, vegetable and mineral kingdoms will come to light and will add to the wealth of our country. Within the small scope provided in India to the Geological Survey, the Agriculture Departments and the Forest organization, excellent work has been done, but these attempts are insignificant compared to the task that lies ahead, particularly with respect to a quantitative estimation of our national wealth.

These services will have to be considerably augmented to get even an approximately correct idea of our natural wealth. India expects that her raw materials and hydro-electric and other sources of power will enable her to establish many industries. Besides raw materials and cheap labour there is something else which India must have before she can hold her own in the industrial field. She must not depend completely for her basic chemicals and heavy engineering equipment on outside help. After power and fuel these industries must come into their own in our country, as we possess most of the raw materials for the purpose. It ought to be possible for us to co-operate with Great Britain and the U.S.A. on honourable terms in the matter of the establishment of such industries as automobile engineering, aircraft production, dyestuffs and shipbuilding. There are several basic problems which India must solve side by side while planning for the future, and it particularly is in this that we can co-operate with England with mutual advantage.

TRAINING OF TECHNICIANS

The most important problem which faces us is that of trained men of first-class scientific ability. One has to acknowledge with shame that in spite of all her university education and other educational activities India has not produced sufficient men able to handle modern industry. There are a few individuals here and there who would stand competition with any in the world, but for a mass scale development of industries one needs a very large number of first-rate workers. It must be admitted that a high proportion of the potential ability useful to industries has been allowed to run to waste largely owing to the defects of our educational system. The problem regarding the shortage of able teachers is even more acute in India than in this country, with the result that one cannot envisage a method of enabling young men who possess high native abilities fitting them as industrial and scientific personnel to develop quickly. The large-scale development of education in India has engaged the able attention of Mr. John Sargent, who has expounded his plans to this Association. It is obvious that India must expand her technical colleges and polytechnic institutes in order to train up the necessary personnel. But as this is a long process we shall have to turn to Britain for providing such technical talent as you can spare for short or long terms to man her research institutes and technological departments. You can also help us in searching for such talent in Europe, Russia and America, if you cannot spare us many of your first-class technical men at this juncture.

The Council of Scientific and Industrial Research has under consideration an extensive scheme of awarding scholarships for research workers who will familiarize themselves in suitable countries and institutions with the methods of manufacture and research on a large variety of specialized subjects. When these scholars return, industry and technical institutions will no doubt absorb them immediately. We need your help and co-operation in selecting suitable educational institutions for these workers. This will mean a significant extra load on your existing educational facilities, but it is vital for our mutual co-operation. It stands to reason—and I cannot emphasize this too strongly—that the future captains of industry in India will re-

member with gratitude their old teachers, and their thoughts and knowledge will turn back to this country for the purchase of machinery and for help with respect to technical staff. If this process is to continue on a large scale we shall have to bring into being certain organizations, and this leads me to the subject of the establishment of scientific liaison officers in England and America.

SCIENTIFIC LIAISON OFFICERS

There is need of Indian organization in England, America and Russia for the purpose of scientific liaison with these countries not only to get the necessary help in securing suitable scientific and technical talent for India, but also for getting admission for Indian technicians and science students in important centres of training in these countries.

The Royal Society has given a lead in this matter and the British Commonwealth Science Committee appointed by them have made the following recommendations:

1. That a suggestion be made to the Governments of the various English speaking countries that they should consider the possibility of maintaining permanent scientific and technical representation in London and possibly also in other capital cities of the English-speaking world.

2. That if scientific and technical representatives of the Dominions and India are permanently established in London these together with official representatives of science in the United Kingdom and the Colonies, should be constituted a British Commonwealth Scientific Collaboration Committee to act with the Royal Society in the discussion of topics of common interest, to keep in touch with all agencies and organizations for the collection and dissemination of scientific information to further schemes for co-operation in research and to make such recommendations and proposals for common action as seem fit.

The scientific mission which is now visiting England is examining the ways and methods of giving effect to this plan and I have no doubt that India will benefit greatly by this. Similarly there should be liaison officers sent from British organizations to India so that they may keep in touch with the scientific and industrial progress in our country. India has so much material for scientific investigation and so many young investigators that contact with them will be quite an interesting and worthwhile experience for any British scientist.

CONTACTS WITH SOCIETIES AND UNIVERSITIES

If a central scientific office is established for co-ordinating scientific and technical activities in England and India it will be possible for us to have the benefit of contact with learned societies, universities and technical institutes. We are already using the good offices of the Royal Society for the selection of such staff as we are unable to recruit in India but if the programme of development that is being drawn up in India is to be given effect to *in toto* there is hardly any society or university which we shall not explore or make use of in our search for useful men. It is quite likely that we shall have to appoint panels of experts in your universities, societies and associations to help us in getting right men for our national development. Industrialists in India have been frequently duped by foreign people posing as experts. The contacts which will be established in the manner proposed will help us in the selection of really competent men by persons who are fully conversant with their profession and have first hand knowledge of the talent available in this country.

CO-OPERATION IN INDUSTRY

The subject of co-operation in industrial development has several important aspects. It is, for example, intimately related with political and social problems. I wish to deal with this subject from the scientific point of view alone because the subject is capable of being dealt with from that point of view and although there can be differences of opinion even amongst the scientists a real decision can be arrived at without doubt. Co-operation in industry particularly with other countries may be envisaged in the following items:

- 1 Share in capital
- 2 Share in royalties and premia on processes of industrial interest
- 3 Pooling together of scientific knowledge through societies and Government Departments
- 4 Research associations
- 5 Exchange of employment of technical talent.
- 6 Training of apprentices for scientific, commercial and social work related to industry
- 7 Co-operation in regional allocation for the distribution of an industrial product.
- 8 Co-operation in transport

Some of these factors are not entirely scientific in character for example the pooling together of the capital. However in the Bombay Plan the following significant paragraph occurs

India's credit in foreign capital markets is now very high and she can, therefore borrow substantial amounts of capital if she so wishes in these markets especially in America

This represents the view of the best commercial men in India. From the psychological point of view which is now regarded as scientific pooling of capital has several very desirable features. It leads to good will between those countries with whom we have to be friendly. Common money is like common blood and leads to a cementing of good relations when it is shed in a common cause. I am convinced that if in the past Indian and British business men had co-operated in enterprises brought into being by common capital the political factors which sometimes impede our industrial progress now would have long disappeared. Perhaps the masses may have been exploited to some extent, but there could have been nothing in that kind of association to prevent the masses joining in and demanding nationalization when the time for it became ripe.

We know of a number of industries which have been introduced in our country in which the manufacturer has succeeded in buying a process or plant either on the basis of a lump sum payment or a small royalty extending over a certain number of years. Sometimes blue prints and drawings of a plant may be acquired on payment and the plant may be constructed in India itself. This would save capital expenditure. There will be in the future a greater reciprocity with India as regards this type of exchange. So long India has only been purchasing the processes only. The beginnings of our ability to give something outside have been laid during the war and are sure to continue.

CO-OPERATION FOR TECHNICAL REASONS

Co-operation with foreign countries is necessary sometimes for technical reasons. Take for example the dyestuffs industry. Barring Germany which also has agreements and understandings with the dyestuffs industry in Great Britain and America there is no other country in the world which is able to stand on its own legs alone. If India were to attempt to be entirely independent of the outside world it would have to acquire slowly and laboriously the experience which others already possess. In that event it would not be possible to establish the industry in India even in fifty years time and the costs too would be prohibitive. If on the other hand India were to come to an agreement for co-operation with some large and well-established concern in Europe or America or both so that the technical experience and expert advice were available to us at every stage the establishment of the dyestuffs industry on lines I have mentioned would become feasible.

Such co-operation should not, however be in any way at the expense of Indian interests. Any company or companies that may be formed on this basis must have a majority of Indian capital and Indian directors and an agreement should be definitely made for the training of Indian technical personnel from the highest to the lowest so as to enable Indian personnel to direct the conduct of the industry within a reasonable period. The dyestuff industry is of such basic importance in the national economy that Government should exercise a jealous supervision over its conduct assuming a direct share in the control if at any time it is found necessary. Govern

ment may also consider direct participation in the capital, as has been done in other countries.

An alternative to this would be no direct association with any foreign dyestuff interests, but the engagement of the best experts and consultants wherever available for advice and guidance of Indian interests who would be solely responsible for the establishment and management of the Indian dyestuff industry. This alternative, though feasible and most suitable from the point of view of ensuring the complete independence of the Indian industry is not so attractive in other directions, and will not lead to such an early establishment of the industry. For one thing there are a number of secret patents and processes which are open to the large dyestuff corporations who form part of the international cartel which will not be open to the nascent Indian industry. Secondly it is not possible for the industry to engage the services of all those experts who possess a knowledge of the various patents and processes which would be required.

There are other industries in which technical co-operation is necessary, and it is unscientific and unwise to delay the establishment of such industries as internal combustion engineering, machine tools, aeroplane manufacture, automobile industries for narrow nationalistic reasons. It is possible to share these developments with proper safeguards with other countries and it should be done early. For unless transport facilities are considerably increased in our country, even agricultural development will be of very little value. I am an advocate of co-operation in manufacture in spite of its imperfections and difficulties which may arise in actual practice as I do not see any other method of making our country industrially great.

THE SCIENTIFIC APPROACH

In the end I feel I must say without fear of criticism that a scientific approach to India's tangle is more likely to create results than any other method. Scientists, as a rule are more international minded than any other class of men and they understand the implications of discoveries and inventions which if not properly utilized will lead to dire consequences to humanity. The element of self-sacrifice which scientific training imparts adds to the chances of success. The complaint which is often heard against Mahatma Gandhi's non-participation in the war effort and against a section of the Indian community reminds me of the American story of Sam and Moe.

Moe went to his friend Sam and said, "I want you to lend me \$2,000." The answer said Sam, is positively NO. But, Sam protested Moe in 1929 when bond and share broke from 188 to 50 who gave you \$10,000 to keep you from being wiped out? You did admit Sam. And in 1931, when your daughter Shirley had pneumonia, who took her to Florida to recuperate? You did my friend. And in 1933, when we were fishing together, who drove into the rapids and saved you from drowning? You did, Moe, it was wonderful. Well, then Sam in heaven's name, why won't you lend me \$2,000? All the things you say are true," said Sam nodding his head slowly. But what have you done for me lately?

Let us cease to question each other about the past. On what we do to each other now and during the post war period depends our future. Let us hope that India will play her part and Britain hers for the mutual benefit of each other and of the whole allied world.

DISCUSSION ON THE FOREGOING PAPER

A MEETING of the East India Association was held at Caxton Hall, Westminster, on Thursday, October 19, 1944, at 3 p.m., when a paper by Sir Shanti Swarup Bhatnagar O.B.E., F.R.S., entitled *Science and Industrial Progress in the New India* was read and discussed. Professor A. V. Hill, M.F., F.R.S., occupied the chair.

The CHAIRMAN expressed his pleasure at taking the chair at a meeting of people so competent to judge, and to criticize if necessary, the views expressed in the paper to

be presented. Sir Shanti Bhatnagar, he said, spent some years in England in the twenties, working at University College; he had been Professor of Chemistry at Lahore, and was now Director of Scientific and Industrial Research for India, one of the most important scientific posts which India possessed and one in which he could influence not only the scientific but the industrial development and the general well being of his country in a way open to very few people. Sir Shanti, though he sometimes described himself as a good nationalist and a fighting Punjabi, was a very good friend of this country and far from being an isolationist, desired the closest co-operation of the two countries in solving the urgent problems of the development of India.

After the reading of the lecture

The CHAIRMAN said that the applause which had greeted the lecture showed the meeting's approval of Sir Shanti's sentiment that the future depended on what was done now and during the immediate post war period. If people would think of Now and of the Future the outlook would be much more hopeful than if they thought too much of the past.

Sir Thomas Holland had written to express regret that illness compelled his absence. It did not appear however that Sir Thomas was very ill for he showed his usual fighting spirit by adding that all the proposals in the paper were included in the report of his Industrial Commission in 1917-19!

Mr Amery knew very well how long the scientific people in England had been looking forward to the presence and collaboration of their Indian scientific friends. They raised the matter some years ago, but for a long time nothing seemed to happen though that was not their fault or Mr Amery's. They had high hopes now for the collaboration which would result from bringing scientific, technical and industrial people together.

Personally he agreed with everything that Sir Shanti had said apart from the attribution of any magic to himself. There were three factors which had contributed to anything that he had managed to do. He thought it was Sir J. C. Ghosh who said the other day that he had never seen so indiscreet a professor—a man who seemed to have the motto *Indiscretion is the better part of valour*. That was the first factor and his Indian friends seemed to have that quality in equal measure. That was the way to get things done. Safety first was not the best guide. The next factor which enabled things to get done was Sir Shanti himself. Personally he threw himself a good deal on Sir Shanti's shoulders while in India and Sir Shanti carried the burden round the country; it was due to his energy, skill and knowledge and to his great influence with his colleagues with industry and with the Government that it had been possible to get so many things done. The third factor was the unvarying kindness and welcome which he himself received from everybody in India and particularly from the scientists of whom five were present that day. It would have been impossible to have a kinder or more enthusiastic welcome. If anything was done it was they who chiefly did it.

He was glad that Sir Shanti had emphasized the part which this country could play in the great developments which could be foreseen in India. Personally he had frequently urged the primary importance of the biological triangle: agriculture, food and health, but that did not mean that industry was left out. The development of industry was an essential factor in making India more prosperous and in producing an efficient agriculture and an efficient health service. The whole development of India had to go on together. One advantage which perhaps he had in going to India was that he was a physiologist and every physiologist knew that every single organ in the body was linked with every other and that it was not possible to treat any one of them in isolation. India was a living organism and had to be considered as a whole, not in separate little bits.

Sir Shanti spoke of the need for this country to help in providing training for the technical and scientific talent which was undoubtedly available in India. A beginning had been made recently in training the Bevin boys, but that needed to be stretched a good deal both in magnitude and in direction. There was a long queue of young Indian scientific men who wanted to come here and to other countries for

higher training but who had not been able to come because of the war. All the help possible must be given to them. It would not, as many Indians would be aware, be easy because there was going to be a very heavy overload immediately after the war on the educational, scientific and research organizations of this country but if India would choose her best men and send them this country must and would see that they got all that was ours to give.

He had been interested in Sir Shanti's reference to the dyestuff problem. All those who had been to India thought of it as a land of colour. A great deal of that colour was due to dyestuffs, yet almost all those dyestuffs were made elsewhere—they should be made in India itself.

The Right Hon. LEOPOLD S. AMERY, M.P. (Secretary of State for India and Burma) said that all who had heard it had been delighted with the interesting and profoundly thought out and wide-ranging address which had been given by Sir Shanti. The Chairman had suggested that Sir Shanti had shown the valour of indiscretion. If indeed Sir Shanti had done so it was to be hoped that he and his colleagues would continue to show that valour and to speak frankly all that was in their minds. After all the last thing that their British hosts would wish would be that their distinguished guests should give up their time and come so long a way in order to say what they did not think and everyone would be glad if Sir Shanti frankly put his finger on any points which undoubtedly created misunderstanding and suspicion between Indians and the people of this country.

Sir Shanti had ended his lecture with a happy little story which suggested that it was not too well for any people to dwell on past favours which they might think and rightly think, that they had done to others. It was equally true that others should not dwell too much on past injustices of which they thought that this country had been guilty. Undoubtedly it was true that political and still more industrial relations between India and this country were affected by a suspicion that this country or at any rate the industrialists of this country would wish to obstruct the progress of Indian industry in the interests of the British export trade. What undoubtedly lent colour to that was the fact that in the last century British authority was exercised to prevent the protection of Indian industries as against British exports more particularly in the case of the cotton industry. It was well to recall however that in those days the people of this country were convinced firmly almost fanatically that Free Trade was essentially beneficial to everybody and that wherever we could we were bound in duty by the obligation of trusteeship to maintain Free Trade. He had never agreed with that point of view but he would remind Sir Shanti that for many long years after we conceded to India the right to develop her industries by protecting them we continued to impose the handicap of Free Trade upon ourselves in this country and that at any rate for many years past there had been no political action which would interfere with India's power to develop her own industries.

If he might venture on a point of correction in connection with one recent example quoted by the lecturer the Sugar Convention he would like to say that it was a scheme of which he himself entirely disapproved because it sought to cure the disastrously low level to which sugar prices had fallen by restriction in the first instance by restricting exports from countries which were accustomed to export and by discouraging exportation from countries which had previously not been exporters of sugar at all. It was only just before that time that India had moved from the position of a country which imported all her white sugar to a country which had the good sense to begin manufacturing it for herself and which at the very moment that that convention came into force was in a position to export some. That had nothing to do with any desire to obstruct the development of Indian industry. He could say unhesitatingly that the Government of this country wanted to see Indian industry develop to the fullest extent and so far as the industrial section of this country was concerned he had discussed the subject with many industrialists, and the last thing that they had in mind was the idea that the British export industry could best prosper by India's being held back in industrial development. On the contrary their belief was that the more prosperous India could make herself the more she would, in the ordinary course of the needs of consumers and the needs of factories for capital goods, have

recourse to help from outside and that, provided we did not think that India must always buy what we had been accustomed to sell her but were prepared to provide in quality and in kind the goods that India needed there would always be a fruitful opening for British trade with India and an even more fruitful opportunity for intimate co-operation and collaboration between British industry and the nascent industries of India.

He did not think that there was one of the eight headings which Sir Shanti gave as the basis of his conception of co-operation between the industries of the two countries which would not be unhesitatingly accepted today by the leaders of British industry. We in this country looked forward to the maximum development of India's resources and undoubtedly we too had moved very far from what might be called the mere exporting and trading conception of national development. We realized that the more a country could within itself balance the different elements of production and do so in order to extract the utmost possible value not only from its material resources but even more from its human resources the better for that nation and the better through the consequent overspill of trade which would always occur for the world as a whole.

He thought that we were more and more conceiving of nations or groups of nations as the basis of systems of intensive full development, stable employment and human well-being and that was not in the least inconsistent with a wide measure of interchange of products and of industrial collaboration. Still less did we conceive of scientific development as something which could be carried on in isolation and in a spirit of jealous monopoly by any one nation. Whatever administrative or economic or monetary policy could do it could avail very little in the world today unless industry had behind it science and research. He fully agreed with Sir Shanti that for that intimate scientific co-operation between their two countries and between all the countries of the British Commonwealth and indeed within the wider circle of the world generally was perhaps not only the most fruitful method of collaboration from the point of view of practical results but also the field in which collaboration came most naturally and most beneficially smoothed the way for wider collaboration in other fields.

It should therefore be said quite frankly that if the scientists of the two countries came together on the lines that Sir Shanti had indicated it would make it much easier for the industrialists to come together and if both of them came together that would not indeed displace political and constitutional problems but might create a better setting for them and create that atmosphere of mutual goodwill and mutual co-operation in which even those problems might find an easier solution.

Dr J. L. SIMONSEN, who was introduced by the Chairman as the founder of the most important scientific association in India, the Indian Science Congress Association, said it gave him great pleasure to take part in the discussion since he had had the pleasure of knowing Sir Shanti for a long time and had been partly responsible for getting him the first opportunity of working on his own in Lahore. He had therefore followed Sir Shanti's activities with very great interest and had been privileged to follow the work which Sir Shanti had done during the war on co-operation between industry and research in India.

In considering the utilization of natural products by industry it should be borne in mind that in the absence of industry the standard of living of a peasant community could not be raised. What should be done in India and in many of the British Colonial possessions was to secure the development of industry alongside the ordinary peasant industry by securing the utilization of farm products by industry. No country was richer in natural products than India. The Geological Survey was small and that was to be deplored and it was impossible to look without distress on the lack of knowledge of Indian botany and zoology. The Botanical Survey had for years almost ceased to exist, in spite of the strong recommendation of Sir Thomas Holland's Commission that its staff should be very largely increased and the Zoological Survey had become almost a museum specimen.

Those activities would have to grow but a field which could be developed now was that of the utilization of farm products. Attempts had been made elsewhere to

utilize these, and that attempt had been most successful in the United States, where there were four laboratories which dealt essentially with the question of finding an industrial use for agricultural products. He suggested that that was where India also could make a very great contribution—namely in the industrialization of her agricultural products, the waste products of agriculture, such as, for example, bagasse from her sugar and the waste molasses which at present she poured out in an attempt to fertilize her soils.

Dr W A JENKINS said that there were three points to which he would like to refer and, being an educationalist, the first of them naturally arose from Sir Shanti's reference to the part which education had to play in industrial development in India. Sir Shanti rightly observed that before any plan for industrialization could be carried out it would be necessary to train up a band of experts, and mentioned the creation of polytechnics and colleges and the sending of men to take advantage of the resources of other countries. That was obviously very necessary but it was a problem which was not too difficult of solution: there were plenty of Indian youths ready to be trained and the amount of money involved in the building of a few technical colleges in India at the college level and in sending people abroad was not large.

There was however, another aspect of that problem which was far more difficult of solution and far more germane to the question of the industrialization of India. No industry could flourish with top level men only: what was really required was a host of middle level people—skilled artisans, overseers, technicians and others who really did the work in industry. It was that aspect of the problem which would create the greatest difficulty in India because so far technical and vocational and practical education had not been admitted into the educational schemes of the country. He was aware that in the Advisory Committee report, which was published last year there were proposals for the establishment of junior and senior technical schools. That plan was an admirable one but in the carrying of it out a great deal of spade work would have to be done to overcome the opposition of the people to practical forms of education and to convince those in charge of education in the country that technical and scientific education was worth while and was definitely in the interests of the country.

For example, it might come as a shock to some to learn that while there were in Bengal no fewer than 1,700 high schools there was not a single Indian high school where science teaching was given with practical work for the students. There had been formed in Bengal (he forgot how many years ago) an agricultural institute and a real attempt was made to train men for practical work but Sir J C Ghosh would probably agree that so far all that it had succeeded in doing was training a certain number of people with agricultural knowledge who insisted on going into Government service to administer agriculture. About twenty five years ago science classes were started to try to get some students away from the ordinary sterile education into what was thought would be more fruitful scientific and technical education. At present in Bengal there were some 390,000 students in high schools but the number attending such classes was under 500.

One of the problems which would have to be faced therefore was that of bringing home to the people that a practical type of education would not only lead to the solution of their economic problem by providing employment but be in the interests of the country generally. He hoped that the great influence which Sir Shanti and his colleagues possessed would be used when they returned to India to persuade people to allow their children to take up a form of education which led naturally to industrial, commercial, agricultural and technical development generally. He was aware that in Sir Shanti's own province the problem was not so acute and the return of hundreds of thousands of youths who through war emergency employment had been given a technical training would provide a great impetus in the desired direction but it was otherwise in Bengal, Bihar, Assam, the Central Provinces and some of the other provinces, where people were very backward in their outlook on that type of education. The time should have long gone by when scientific education was regarded as necessarily non-cultural, but that lesson had still to be learned in India.

He would omit his second point for lack of time. His third point was that sci-

tists had so far been regarded as experts in a very narrow field and when a technical problem had arisen they had been called in to give advice. It was usually said that the scientist was not a good administrator. That accusation could be made against a good many professional administrators. Whether there was validity in it or not, he hoped that when the high level Consultative Council of scientists in India was formed it would not be regarded as a body to which a minor technical problem could be thrown and a solution asked for. It was time that scientific method and logical thinking were introduced into the normal problems of government and administration and into a co-ordination of the different activities of government which at present was altogether absent. He hoped that the training and the thinking powers of Sir Shanti Sir J. C. Ghosh and of the other scientists who had come to this country would be applied to the important problems of normal organization and administration and the development of the country. The Chairman had said that it was not his magical powers which led to action being taken but many who knew India thought that it had the Chairman not been there that action would have been delayed. He hoped that the Chairman would make further use of his influence and insist that the terms of reference of the Consultative Council were such as would make the very wide knowledge, experience and trained thinking powers of some of the ablest men in the country available for dealing with other than purely technical problems.

The CHAIRMAN expressed strong agreement with what Dr Jenkins had said. When he himself went to India he was told that physiology was taught in the schools there but he found that it consisted of a lot of diagrams and little more. He also agreed that scientific men should be in a position as equal partners with others to influence policy.

Mr A. H. KILNER, a director of Messrs. Courtaulds, speaking as a representative of British industry, said he had found it very illuminating to listen to Sir Shanti's address. From his demonstration of science one would gather that he was a scientist all the way through, from the origin of materials right down to their use, with one exception, and that was the capital used in industry, but he had discovered that the union of the equity interests in such industrial capital in India scientifically might be said to be the union of blood, and that was very important because it meant being joined together in one family, and one of our aims in this country was to get closer and closer to India. It might fairly be said that no other country knew India so well as did Britain, and he was sure that India must feel that there was with all her faults, no other country she would be so ready to trust.

That being the case, he felt that the time had come when, even before the war was over, they should decide whether they were going to work together economically. Before people could exercise their minds properly their bodies must be provided for, and economic questions came before spiritual ones. Even the Yoga doctrine was based on the physical before coming to the psychic. There seemed to be a really practical businesslike spirit even among the scientists, and there was to be a visit from Indian industrialists as well. The industrialists would probably repeat in principle at any rate, what the scientists had said, but they must go a step further. The scientist went in for fundamental research and then for practical research, and then the industrialist had to come in as a practical man and consider the finding of the money, and the workers and the getting of the output, and whether economically the proposition was sound.

The political question was often raised of whether one should make a profit or not, but as long as human nature continued he maintained that a profit of some kind must be looked for. It might be expressed in terms of money, but it was well being that mattered. It was no use starting out on lines which would lead to loss and disappointment to the workers; it was essential from the industrial standpoint that the economic position should be well founded. Without that, all the fundamental research counted for nothing, it might be of use a hundred years hence, but we had to think of our own lifetime. He felt that the conferences which were now taking place with expert representatives from India must lay the foundation of a really good future. There must be an interchange of workers, and Indian foremen and other

workers must come to this country just as much as the scientists and the higher technicians. They must go through the factories and see how the actual work was done in order that they should be able to instruct those under them when the plant was erected in India.

Sir ALFRED CHATTERTON said that those concerned with the initial stages of fostering industries in India forty years ago would have greatly appreciated Mr. Amery as Secretary of State because they had had to contend not only with a Free Trade policy but also with a *laissez faire* attitude which made it very difficult to get anything done. When anything was proposed generally more or less academic objections were put up which delayed matters until it was impracticable to carry it out. Before the last war they had been engaged in Madras in preparing plans for the establishment of wood distillation, a by-product of which was acetone at that time essential in the manufacture of cordite. A great deal of work was done on the project, but in 1910 the military authorities said they were not interested because they could get plenty of acetone from Germany!

The paper referred to the relation of science to industry in the new India, and he would like to know what the new India was going to be. Would it be an independent India? Would it be a Dominion or what would happen? He was certain that it would not remain as it was at present. If it was an independent India it would certainly have to devote a very large amount of attention to two very pressing problems: the provision of food for the enormously increasing population and the provision of the material from which it could manufacture all the munitions and plant required for purposes of defence. An independent or even a Dominion India would have to have its own Army, Navy and Air Force. The equipment of these forces would very largely determine the trend of the major developments of industry in the future.

A very large amount of work would have to be done on the agricultural side and that would mean a very large development of subsidiary industries connected with agriculture. Those two factors would practically dominate the whole situation in the future.

It was scarcely possible to discuss the paper without some reference to the Bombay Plan which most people would probably agree with him in regarding as a sort of kite sent up to see which way the wind blew. It was an ambitious plan requiring very careful examination. The main item was finance and after that there came the question of protection. After the war there would be the most intense industrial competition between the nations who had so largely developed their industries to supply the munitions and other materials required for the war. They would turn their factories over to the production of goods for export and that would make it difficult for India without a high degree of protection to establish new industries except those whose products could be used entirely within the country. There did not seem at present to be much possibility of India creating an industrial export trade. He did not want to throw cold water on the projects which the industrialists of India were now trying to evolve but it was well that they should look the difficulties in the face and see how they could be met.

Reference had been made to the fact that there was a very large amount of hydroelectric power available in India. That was hardly true. The estimate was given of 27 million kilowatts but when one came to look into it in detail one found that the difficulties of developing hydroelectric power in India were probably greater than in most other parts of the world owing to the fact that the rainfall depended entirely on the monsoon and one might get tremendous quantities of water-power for half the year and none at all for the remainder. To overcome that it would be necessary to go in for very large and expensive storage works for which sites were not always available.

Both Sir Shanti and other speakers had referred to Indian dyestuffs. In 1920 or 1921 a Commission was appointed to consider fiscal questions in India and he suggested to them that the question of dyestuffs was important and that a great deal of interest was taken in it by the military authorities. At that time Field Marshal Sir William Robertson was in India and he happened to be a director of British Dyes, Ltd. Sir William asked him to meet him, and in Bombay we discussed the question

of establishing an Indian dye industry Sir William agreed to take it up in London with British Dyes, and subsequently a meeting was held there which resulted in the preparation of plans and estimates for a factory costing about 80 lakhs but suddenly the whole project was dropped the excuse put forward being the slump which occurred about that time which it was said prevented the raising of the capital necessary What was really at the bottom of it he thought, was the agreement between dyestuff manufacturers, who were determined that dyestuffs should not be manufactured in India if they could help it

Captain S T BINSTED asked whether Sir Shanti and his colleagues really thought that the Bevin Scheme for Indian trainees had done a service to India If it had action might be taken to see that what was originally a war measure was carried on in the post war years He himself felt that though on a small scale it had been of really practical help to industry in India He had come in contact with the young men who had come from India and he had great faith in the development of the scheme on a very much larger scale He would emphasize that what had already been done had been done solely as a war measure and official interest might wane both in India and in this country if some impetus was not given to it now He hoped that after the war hordes of young men would come from India to be trained and so build up a reservoir of sound engineers ready for service and ready to take their places in the new factories which India's industrial progress would provide in the years immediately after the war

SIR SHANTI BHATNAGAR in reply said the Bevin boys' scheme had been of great service and the boys had been very useful particularly in ordnance factories There was no doubt that India would like more trainees of that type in various industries to come to this country Not only research workers and scientists of the first rank but also a large number of technicians would be required for the various industries which would be developed in India Some such scheme would have to be adopted after the war Indian business men were interested in training of that type

He was glad that the ideas which he had expressed had met with general approval He was sorry that when first put forward some twenty five years ago similar ideas were not acceptable either to India or to Great Britain He was particularly glad to hear that Sir Alfred Chatterton believed that behind the abandonment of the scheme for an Indian dyestuffs industry was a question of international trading policy He only wished that Sir Alfred had spoken about it as freely at the time as he did now For some reason some people though good friends of India felt hesitation in saying what they knew to be true He hoped that Englishmen who were of opinion that co-operation in industry would be the solvent of India's industrial future would say so boldly Indian industrialists would give great weight to the opinions of scientists in the matter of scientific development, but frankness was needed and if there were unpleasant things which should be said they must be said for out of discussions of that type alone would arise a true solution of their problem

With regard to hydroelectric power India had in fact more potential hydroelectric power than the figures given in the paper would indicate and Sir Alfred Chatterton's criticism of those estimates was not based on the most recent investigations which had been carried out on the subject It had been established beyond doubt that it was possible to get that much and more He had not included the figures which could be arrived at by damming the canals and rivers The estimates as regards quantities were not inaccurate but it was evident that hydroelectric power when developed might prove somewhat costly in transmission, and it would be necessary to plan the kind and location of industries for economic reasons Electricity should play a great part in India's transport so that coal might be employed for more useful purposes

SIR ATUL CHATTERJEE, who proposed a vote of thanks to the Chairman and to the Lecturer said Professor Hill would not admit that he was a magician, but personally he maintained that he was During his own official life most of the efforts of those who were interested in the industrial and scientific progress of India had failed because always some objections usually financial were raised Professor Hill however

went to India about a year ago, and in the Budget a few months later grants were proposed for rapid scientific progress. What was that but magic?

As for Sir Shanti, it was a cause of the deepest gratification to everyone that Sir Shanti had by merit and industry risen to the position which he now occupied, and had been able to persuade the Indian Government, with the magical help of Professor Hill to grant sufficient money for a beginning to be made with the industrial and scientific development which was needed in India. Sir Shanti would have the full support of his colleagues who had come with him to this country and of all the scientists in India in the very noble work which he and his friends were doing in that direction.

THE STORY OF THE INDIAN AIR FORCE

BY WING-COMMANDER W. W. RUSSELL

Few people realize that flying began in India as early as 1910, not many years after the pioneer flights of Orville and Wilbur Wright in America. During the last war several Indians joined the Royal Flying Corps, one of them being awarded the D.F.C. It was the nephew of this pioneer Indian pilot who was among the first six cadets to join the Indian Air Force twelve years later, and who subsequently became the first Indian Commander of its first squadron.

From 1919 until 1933 the air defence of India was entrusted to a few squadrons of the Royal Air Force, which served with conspicuous success on the North West Frontier. The foundations of the Indian Air Force were laid by the recommendations of a well-remembered Government Committee, which included such well known names in Indian public affairs as the late Pandit Motilal Nehru and Mr. M. A. Jinnah. On April 1, 1927, the Skeene Committee made recommendations which led to the formation of an Indian Air Force and suggested that, in the early stages, its pilots be trained at Cranwell. It was not however until 1932 that the Indian Air Force became a separate service under an Act of the Legislative Assembly.

But the far-sightedness of these public men would have been of no avail without the enthusiasm of the six young Indians who were the first cadets to be trained at Cranwell. Sirkar, Mukerji, Bhupendra Singh, Awan, Amarjit Singh and Tandon left for England in 1930, and Engineer followed them a few months later. These six young Indians were to lay the foundations of a new Air Force, an Air Force which at that time existed on paper alone and which many believed would never materialize into the complex organization of men, aeroplanes and equipment which goes to make up a modern army of the air.

THE EARLY CADETS

These six cadets were among the pick of Indian sportsmen, and quickly made their name at Cranwell. Sirkar captained the hockey team, in which Awan, Amarjit Singh and Mukerji also played, while Amarjit Singh captained the tennis team in which two of the others also played. Among the most interesting of the early cadets was Engineer, who is now a Wing-Commander D.F.C. and who in 1930 was the only one of the pioneers with previous flying experience. He had flown from India to England and back in a Tiger Moth. For this flight he won the Aga Khan prize awarded to the first Indian to fly from India to England. This flight in a Tiger Moth was no mean feat in those days.

Other cadets from India soon followed, and their names are now well known in the short but gallant history of the Indian Air Force. Majumdar, who commanded No. 1 Squadron in Burma where he won the D.F.C., Henry Rungdhan, son of the

present High Commissioner for India in London, Prithpal Singh, Narendra, Bulbul Khan, Mehar Singh, Arjun Singh, Ravinder Singh, Goyal, they all passed through Cranwell, and on their return to India, were posted to No. 1 Squadron, Indian Air Force. There they dedicated themselves to several years of hard training and operations on the North-West Frontier of India, determined to prove to the critics that India could produce an Air Force in every way as qualified to fight as the Indian Army.

All this while letters and minutes were passing back and forth between the Government of India and the Air Ministry in England. There were many suggestions, some of which were strongly pressed urging the inclusion of the new air arm within the organization of the Indian Army. These proposals were strongly opposed by Air Vice Marshal Salmond who was Air Officer Commanding India at the time. Consequently in 1932, the Indian Air Force Act, constituting the I.A.F. as a separate Service, was passed through the Legislative Assembly in Delhi.

On April 1, 1933, the I.A.F. started with one flight at Karachi. It was commanded by an R.A.F. officer and included a number of British N.C.O.s, since one of the greatest difficulties in building up the I.A.F. was the supply of technical tradesmen. The flight was trained as an Army Co-operation Unit and in fact, all the pilots after completing their course at Cranwell had passed through the Army Co-operation School at Old Sarum in Wiltshire. They were therefore steeped in the best traditions of the R.A.F.

It is fitting that after eleven years the Force which started with six men and a flight of four aeroplanes should have increased to its present strength and have justified the courage and foresight of the statesmen who sponsored its formation and the keenness of the young men who flew its first aeroplanes.

BAPTISM OF FIRE

From 1913 to 1937, A Flight of No. 1 Squadron concentrated all its efforts on training for the pilots were determined to show the sceptics what they could do. It was in 1937 that A Flight underwent its baptism of fire on the North West Frontier and operating from the famous fort of Miranshah against the tribesman who had stirred up trouble under the notorious Fakir of Ipi they gave the Army the closest support possible by observing the enemy and by bombing and machine-gunning them out of their points of vantage on the mountain ridges.

In the following year C Flight, which had since been formed at Karachi took its turn on the Frontier. This flight was commanded by Flying Officer (now Wing-Commander) Majumdar D.F.C. and carried out even more operational flying than its predecessors averaging nearly 400 hours flying every month. The Association had the pleasure of hearing him at the meeting on October 3.

By the end of the year a further flight had been formed and in 1939 all English officers were withdrawn from the squadron and Squadron Leader (now Wing Commander) Mukerji became the Commanding Officer. When war was declared in September 1939 the R.A.F. was almost entirely withdrawn from the North West of India and the policing of the Frontier was handed over to the I.A.F.

At the outbreak of war the first expansion of the I.A.F. took place and the Force was now called upon to cover the wastes of the Indian Ocean and the Bay of Bengal searching for enemy submarines escorting convoys and carrying out that monotonous but vital duty—seaward reconnaissance and patrol.

VOLUNTEER RESERVE FLIGHTS

In the winter of 1939 five Volunteer Reserve Flights of the I.A.F. were raised at Karachi, Bombay, Cochin, Madras and Calcutta. They were comparable to the famous Auxiliary Squadrons in England, and recruited their air crews from the ports at which the flights were stationed. A small number of Englishmen who had served in these large towns in business or the professions were included in these flights.

In Calcutta the flight was commanded by Hem Chandra, well known in the early 30s at Cambridge. The Madras Flight was raised by Donald Law of Binny and Co. a well known personality in the south, and for many years secretary of the Madras

Flying Club Other personalities of the Madras Flight were Charlie Mapthia, a young Sikh who depth-charged a Jap submarine off the Madras coast, and Jehangir Engineer who one dark morning in his Atlanta shook off three Navy Os.

In 1942 David Small a business man from Cochin raised the new flight at Vizagapatam and the manner in which he and a young Indian pilot on one of their first patrols shadowed a Japanese battle squadron in an aged Wapiti with a speed of 100 miles an hour is the epic story of the Coast Defence Wing.

The Coast Defence Flights stationed on the west coast of India were not so fortunate in contacting the enemy as those on the east coast, but they had a great deal of work to do and during the two years of their existence flew many thousands of hours on reconnaissance and patrol.

The Karachi Flight commanded by Eric Sprawson a master from the Doon School, were ordered to Burma in December 1941, and duly arrived on the 22nd of that month with four Wapitis and two Audax, but unfortunately before the flight was able to enter the battle with the most obsolete aircraft engaged in land operations in any theatre of war at that time nine Japanese Army 97 bombers attacked and shot up their aged Wapitis. It was little consolation to the pilots to know that half an hour later the A V G took heavy toll of the Japanese planes over their base.

THE N W FRONTIER

The Coast Defence Flights of the I A F were wound up at the end of 1942 but the Force had now expanded to two more regular squadrons formed and a fourth planned during the year.

In the spring of 1941 the Fakir of Ipi again became active on the North West Frontier and the I A F had once again to go into action against hostile tribesmen which they did successfully and gallantly. As a result of his good work throughout this campaign Engineer won the D F C and Mukerji Janyua and Sergeant Kartar Singh were mentioned in despatches. The last named was one of the first airmen in the I A F to be mentioned in despatches and he has since been given a commission. In April of 1941 No. 2 Squadron was formed under the command of Awan and in October No. 3 Squadron had been formed in Peshawar under Squadron Leader Bray D F C. It was later taken over by Squadron Leader Mehar Singh.

On July 12 1942 261 officers and men of the I A F paraded in front of the hangars at Risalpur to receive their colours and badge from H R H the Duke of Gloucester.

THE WITHDRAWAL FROM BURMA

The next chapter in this short story of the Indian Air Force covers the first Burma Campaign in which No. 1 Squadron played a really outstanding part. It is true that the Burma campaign was a retreat that the Japanese drove the Allies out of the country but the Army was the first to admit that the Air Forces in the campaign did all in their power to stem the advance of the better equipped and more numerous enemy. The I A F with their Lysanders did more than their share in that stupendous rearguard action.

Towards the end of January 1942 13 aircraft of the I A F led by Wing Commander Majumdar with Prithipal Singh Raza and Narenjan Prasad as Flight-Commanders assembled at Toungoo their first base in the Burma campaign. On the second day after their arrival they carried out raids over the border into Thailand the main objective in this first stage of their operations was the enemy-occupied aerodrome at Meikongson. Before they got to work however the Japs raided them at Toungoo but fortunately without damaging any of their aircraft. The next day Wing-Commander Majumdar returned the compliment accompanied by a young New Zealander in a Buffalo. Izzies are in no sense bombers and in order to carry out an experiment Majumdar took up two 250-pound bombs on a lone raid against Meikongson probably the first time it had ever been attempted with that type of aircraft. It worked perfectly and he was able to return to base with the information that from now on No. 1 Squadron was a bomber as well as an army co-op squadron.

When the military situation south of Rangoon deteriorated they were ordered south but after a few days the situation on the Salween front began to improve and the

squadron was moved back north to Lashio, from where they had to carry out offensive sorties over Thailand using Heho and Namsang as advanced landing grounds. Their main objective at this time was the aerodrome and barracks at Chiengmai. At this time they were not provided with fighter escort, and in searching for their targets were compelled to develop a technique of low flying over the tree-tops, below the level of the hills. In this way although much slower than the Jap fighters, they were able to avoid being seen and were never intercepted despite seeing enemy fighters above them on many occasions.

It was now mid-February and the Salween front had deteriorated. No. 1 Squadron flew down once more to the Rangoon area to support the Army. The situation worsened, but the Squadron did very well particularly in opposing the enemy crossing of the river. Field Marshal Wavell sent the Squadron a special message of thanks from the Army.

The general situation was now so bad that all the R.A.F. and the whole of No. 1 Squadron were ordered back to India. Majumdar and Raza continued to carry out raids over enemy territory for nearly a fortnight, during which time Majumdar came into close contact with the Chinese Fifth Army who had taken over from the 1st Division. The ground party who also had to leave were practically cut off but the last train from Yungoo was driven out in fine style by Sergeant Cabinetmaker and I.A.F. N.C.O. who had no other means of getting equipment and refugees away. Majumdar and Raza eventually got out in a flying fortress and we came to the end of the first Burma campaign. The pilots and the ground crews of the I.A.F. had fought strenuously and unremittingly for three months and had flown in the face of many odds with obsolete aircraft.

The end of the Burma campaign coincided with the arrival in India from Java of Air Chief Marshal Sir Richard Peirse who took over command of the Air Forces in India and in a remarkably short space of time reorganized the remnants of our battered squadrons from Malaya and Burma, built modern airfields in Bengal and Assam and during the monsoon of 1942 began to turn the tide of the air war against the Japanese.

RECONSTRUCTION

He quickly realized the importance of expanding and modernizing the Indian Air Force. Soon after the return of No. 1 Squadron from Burma Majumdar was awarded the D.F.C. the first which the I.A.F. had won. Its four squadrons were re-equipped with Hurricanes, the Coast Defence Flights were disbanded and the intention of A.H.Q. to equip them with Hurricanes and Vengeance dive bombers was announced. Furthermore the Viceroy announced that it was the intention of the Government to aim at a target of ten fully modernized squadrons by the end of the year to be officered and manned by Indians.

1942 and the early part of 1943 were spent in re-equipping and training the air crews with their modern aircraft and in a great recruiting drive for many thousands of Indian other ranks to service and maintain the new squadrons. This drive and the increased publicity throughout the country for the new Service gained many thousands of recruits of matriculation standard who were prepared to serve in the ranks, a welcome and novel development so far as this type of Indian youth was concerned. The I.A.F. also became extremely popular with the people and even extreme national papers printed stories and photographs of the new squadrons and of the deeds of No. 1 in Burma.

RENEWED ACTIVITY ON THE BURMA FRONT

By the winter of 1943 several of the newly equipped squadrons were ready to go into action on the Burma front. Within a month of arriving in the Arakan the first to get there, No. 6, had made a great name for itself as a fighter reconnaissance squadron, and its redoubtable Sikh Commanding Officer, Squadron Leader Mehar Singh from Lyallpur, had won the D.S.O. On one occasion when a young pilot from the Squadron had force landed for lack of petrol in a small paddy field a few hundred yards from the Jap forward positions Mehar Singh flew a Tiger Moth into the tiny field, filled up the damaged Hurricane from four gallon tins, put the inept

enced pilot in the Moth and by great courage and skill took the damaged Hurricane off from the undersized and bumpy field to safety

No. 1 Squadron came back under the command of another Sikh Squadron-Leader Arjun Singh and operated throughout the fierce jungle fighting round Imphal and Kohima with considerable distinction. Arjun Singh won the DFC within a short time of arriving at the front. At least two of the dive-bomber squadrons fought through a larger part of the campaign.

THE FUTURE

The IAF has undoubtedly justified the hopes of its founders. But it has grown to its present size under very difficult circumstances. In the years before the war it had only one squadron so that its leaders both officers and NCOs are strictly limited in numbers. The rapid expansion during the war, which was vitally necessary and dictated by circumstances, has inevitably been short term in its results and has shown inevitable weaknesses.

In order to ensure that India retains a strong and firmly established air force after the war it will be necessary to broaden and strengthen the foundations on which it is built. The basis of the professional RAF on which the vast edifice of the wartime service has been reared was the cadet college at Cranwell for the officer cadres and the technical school at Halton for the tradesmen. In the same way as India has built up the officer cadres of her magnificent army at the cadet colleges of Sandhurst and Dehra Dun so the Indian Air Force after the war should be given similar opportunities and should have its Cranwell for moulding the leaders of its future Air Force, and if possible a Halton for the training of its equally important tradesmen and non-commissioned officers.

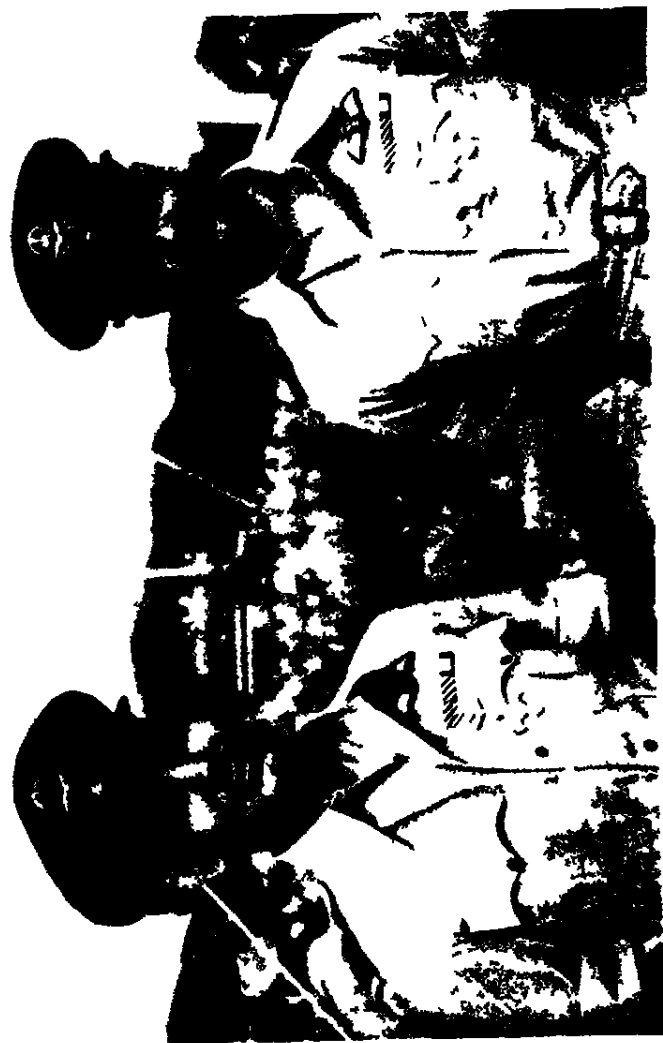
DISCUSSION ON THE FOREGOING PAPER

A MEETING of the Association was held on Tuesday October 31 1944, at the Caxton Hall London SW 1 with the President Major-General the Right Hon Sir FREDERICK SYKES PC QC SI GCI D GBF CMG MP in the chair when Wing-Commander W W RUSSELL read a paper on *The Story of the Indian Air Force*.

The CHAIRMAN said that Wing-Commander Russell started flying in 1932 at Cambridge and went to Bombay in 1934. At the beginning of the war he joined up with the Royal Air Force. He had commanded two squadrons the Bombay Squadron and the Cochlin Squadron and at Delhi he had served under Air Chief Marshal Sir Richard Pearce when he wrote a history of the Royal Air Force. There was no one who knew more about the beginnings of the Indian Air Force and its great growth. Wing-Commander Russell had also been in business for a number of years in India and he sat in the Bombay Assembly from 1937 to 1939. He helped to form the European Progressive Group in conjunction with the Indian Progressive Group and most of those present knew of the value of those two groups in helping young Indians to know each other.

After the reading of the paper

The CHAIRMAN said that Wing-Commander Russell mentioned the aircraft in Calcutta in 1910. It certainly was a great adventure. It was sent out by the Bristol Aeroplane Company under the French pilot M. Jullerot. 1911 was a year of very small beginnings. The RFC was formed on May 13 1912, and began with five officers and a handful of men. He remembered that the King came to inspect the unit that same month and they had only about five pilots and machines. Each aeroplane and engine was different from the others. When the lecturer said that machines in India were a little out of date he could assure him that the R.F.C. machines had the equally great difficulty of being very young.



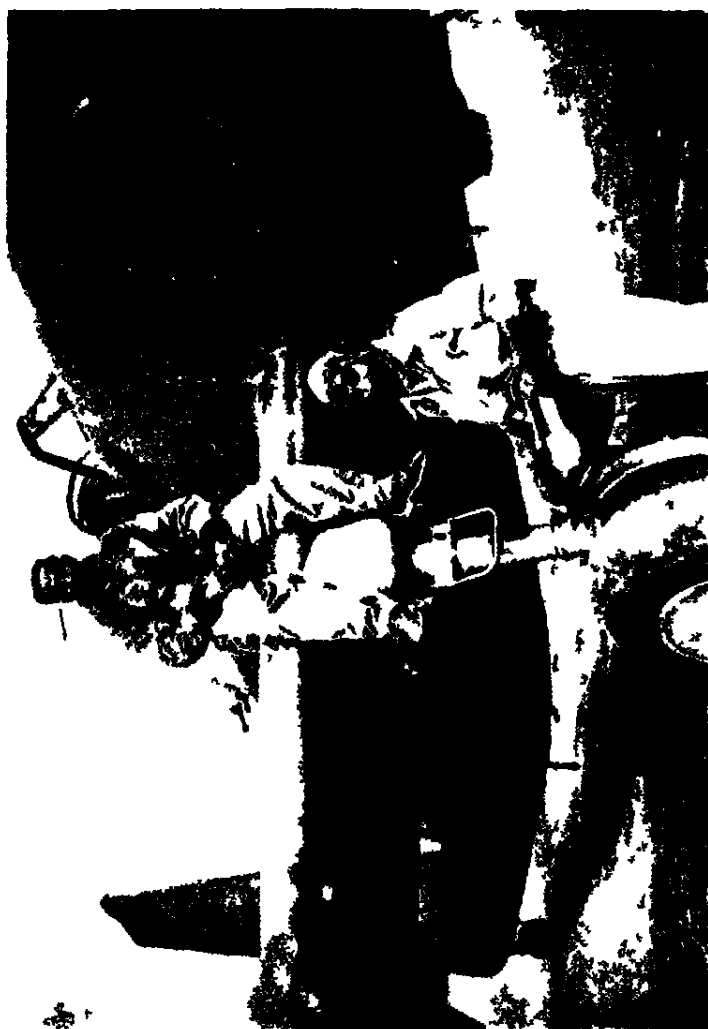
WING COMMANDER ASIA ENGINEER A TARGET FROM HOMBAY AND WING COMMANDER JUMBO
MAZUMBAR A BENGALI FROM CALCUTTA AFTER HAVING BEEN INCORPORATED WITH THE D.I.C. AT AMBALA
BY THE MARSHAL LORD WALKER



THEY ARE THE ONLY ONE WHO CAN BE SEEN BUT NOT THE OTHERS

THEY ARE THE ONLY ONE WHO CAN BE SEEN BUT NOT THE OTHERS

PLATE IV



SQUADRON LEADER VERNIAN PRATF C I A N IN T A N U I E A N T D M T L O M B E R
SQUADRON WIFE HIS NAME ATOR AD I N S F I J I H I D U I E C H I G A N E

The lecture had brought back very vividly the days of the old R F C and also the beginnings of the R.A.F. They had their troubles and trials it was not easy to start a new force but to those who were in at the beginning it was a great pride not only to have formed it but to see it being put into use. Wing-Commander Russell had also had that good fortune in the case of the I A F. He had taken a great interest in the civilian flying club at Bombay and the flying clubs of those days helped greatly to form the Indian Air Force. The Bombay Club was excellent and there were two or three others in India which did splendid pioneer work. He would also like to support the tribute to the pioneers whom the Wing-Commander had mentioned.

The Burma campaign had been mentioned not many people in this country realized the difficulties which had to be overcome in that campaign. He felt that there was too little news from that part of the world and he hoped that the history of the 14th Army and the Indian Air Force in that campaign would come to be better known in this country so that people could realize what a great feat had been achieved in that most difficult of theatres of war.

Flying was very important in India. Not only had India immense scope for flying but her people had a psychology which was well adapted for piloting and flying generally. The Army had done remarkably well on the ground and there was now the beginning of a great air force which he hoped and believed would gain strength rapidly. He was sure that Wing-Commander Russell was right in saying that the Indian Air Force should have its own Cresswell for the training of officers and its own Halton for the training of other ranks. Without such a pair of training establishments it would be almost impossible to get a good foundation upon which to build a large air force.

He congratulated Wing-Commander Russell on his paper. It was of great interest to those who had heard it and it would be a valuable source of information on the formation of the Indian Air Force which he hoped would help to make for peace throughout Asia in which India would be a bastion.

SIR LANCELOT CRAWFORD said that the justification for his taking part in the discussion was that he was present in almost a professional capacity at the passing of the Indian Air Force Act. Mr Edwin Haward would remember the days when this Bill was passed into a Statute and he would also remember how suspicious the Indian was about this so-called Indian Air Force. Mr Haward would also recall that the Indian Navy Bill was rejected with contempt the first time it was put forward in the Indian Legislative Assembly fortunately it was tried again and was passed. There was the fact the ordinary Indian legislator would have said at that time that he suspected the Bills just because they emanated from the British.

They had every right to be amazed at the success of the Indian Air Force. He had seen a collection of young men at Karachi who were the nucleus of a squadron and asked the Commanding Officer how they were shaping, and he said they were absolutely first class. He had dined in the R.A.F. mess and seen these lads in the thick of everything they had the right men and they were perfectly happy. He did not know what the actual reason was but he felt that the young Indian had an extraordinary aptitude for the air.

Coming to the present day someone known as Bill Jones was very well known in Karachi he trained in the Civil School there and he told the speaker he found the lads were extremely quick and sensitive and had a kind of kinship with the air—'young eagles'. He was particularly impressed by the manner in which they joined as young men wanting to fly they quite forgot about the section of the community from which they had come and he could not imagine anything more helpful for India than that there should be a large class of young men totally impervious to communal poison.

Wing-Commander Russell said something about the earliest lads who enlisted in the last war in the R F C and he would like to mention an Indian lad who lost his life but who made his mark as a pilot. His name was Roy and he was educated at St. Paul's School where he was a boxing champion in the Aldershot contests.

There was another man called Hogg whom he would wish to mention. Exactly what Hogg was doing in the Indian Air Force he did not know but he knew him

first as a Provincial Scout Commissioner for the Punjab. He had an incredible capacity for getting on with Scouts and was picked to take a position which might be described as that of liaison officer between the Indian recruits to the I.A.F. and their technical instructors [Wing-Commander RUSSELL. He commanded the Elementary Training School.] He did invaluable work and he would ask the audience to bear him in affectionate memory. He died in most tragic circumstances. Sir Lancelot added that he was in Bombay and was associated as a spectator with the earlier efforts of flying in India and remembered when an aerial circus came to Bombay and they occupied the Oval, which was surrounded by screens some six feet high in order to secure privacy. He would have liked to ask Sir Stanley Reed if he had been present, whether he was guilty of a leader which appeared in *The Times of India* headed 'Grasshopping Round the Oval'.

In reply to Sir WILLIAM BARTON who asked from what sections of the Indian community the officers of the I.A.F. had been mostly recruited the LECTURER said that they came from practically every community. There were a large number of Sikhs but perhaps Bengalis predominated over the Muhammadans which was in interesting contrast with the Army. The Madrasese made very good navigators and pilots but generally speaking, the personnel was spread evenly throughout the communities. The officers and the other ranks who of course were equally important in an air force were recruited from the middle classes as well as from the university type. A great many personnel in the I.A.F. were among those who normally would have tried to get into the literary professions but they had been attracted to the I.A.F. and had thus been saved from joining the ranks of the educated unemployed. It was a prerequisite that all personnel must be educated to matriculation standard and must speak English chiefly because the I.A.F. is part of the Commonwealth Air Forces and English is the lingua franca of the air world. This would be readily understood by recalling how technical terms all over the world are mostly in usage English terms.

Mr POLAK asked if Indians were being trained under the Empire Training Scheme to which the LECTURER replied that I.A.F. cadets had recently joined in this scheme. The first batch of fifty left for Canada during the winter of 1943.

Asked if the hot sun of India made conditions very uncomfortable, the LECTURER said that flying conditions could be uncomfortable in the hot weather. It had been worse he said in the old days of old fashioned craft and open cockpits when the sun came down on the back of the head.

Sir AMBERSON MARTEN said that he was glad to hear of the great aptitude of Indians for the air. The second son of a now deceased Judge of the Bombay High Court joined the Air Force in England and was extremely successful as a pilot. After his death the authorities in a letter to his mother said that he had never made a mistake in the air.

Sir T. GAVIN JONES asked if there was any difficulty in recruiting mechanics for ground work.

Wing-Commander RUSSELL said that there had been surprisingly little difficulty. This may well have been due to the publicity campaign launched in 1943 but the trouble was the time taken in training. It took a long time to train an Englishman to be a reliable mechanic, and the same thing applied to a greater extent in India. The need was for a long and skilled training which was why he was so keen on the establishment of a training school for mechanics in India on the basis of the R.A.F. institution at Halton.

Dr ALICE PENNELL asked if the rates of pay were favourable for the Indian or were they similar to the rates of pay in the Army to which the LECTURER replied that the rates of pay were on a different scale from those in the R.A.F. They were considerably less at the beginning of the war, but now they had been raised. The comparatively low scales at the commencement of the war were due to lack of ex-

perience with a new Service and to the fact that the I A F was administered by the Army consequently the rates of pay had been based on the rates for the Indian Army. The Indian N C O airman was naturally a much better educated type of man than the sepoy. In 1941 the rates of pay had been placed on a satisfactory level. They were not on the same level as the R A F but were considerably more, taking into account the fact that the Indian airman was given free rations, accommodation, sport and so on, than he would probably have been able to earn in civilian life.

Sir JOHN CUMMING proposed a very hearty vote of thanks to the Lecturer and to the Chairman. Wing Commander Russell had given a very interesting account of the genesis and growth of the Indian Air Force punctuated by personal experience and some dramatic incidents. There was no doubt as Field Marshal Sir Philip Chetwode had said at a previous meeting that Indians were well equipped for this work by reason of their sensitive hands. It was most desirable that Wing Commander Russell's account of the I A F should be put on permanent record. With regard to Sir Frederick Sykes if there was anyone entitled to be called the father of military flying it was he and there could be no one better fitted to take the chair at a meeting to hear an account of the youngest air force in the Empire.

INDIA'S POLITICAL FUTURE AND RURAL RECONSTRUCTION

BY THE REV J Z HODGE, D D

(Lately Secretary of the National Christian Council of India
Burma and Ceylon)

I COUNT it a privilege and a responsibility to address you today. Having spent forty three years in India and having received nothing but kindness from the Indian people during that long spell I should be ungrateful indeed if I did not as occasion serves speak a good word for India and thus help to repay a debt of honour.

Returning to this country I have been depressed by two things. These are the meagre space given to India in the public press and the lack of interest shown by Parliament which is the final Court of Appeal on questions affecting the governance of India when an Indian debate is staged. Explanations are readily forthcoming but when it is remembered that the population is 390 millions this seeming indifference is hard to forgive. Considered in terms of human values—and there can be no higher terms—these 390 millions constitute the most important segment of the British Empire.

For the time being the political issue dominates all other issues and until this is rightly adjusted any large scale planning for social, educational and economic advance is unlikely to win that measure of support in public opinion that alone can give a reasonable guarantee of success. There can be little doubt that the general mind of the people is set on complete independence—on this fundamental issue National Congress and Muslim League agree—and the question now is whether or not that will be achieved within or without the British Commonwealth of Nations. At present the current is setting in towards separation.

SWARAJ

A brief reference to the development of the Nationalist movement must suffice but to make my position clear let me say that I regard the demand for complete independence a perfectly natural one and in keeping with the declared aims and trends of British policy. Visiting Bombay as I did my steps would lead me to the

Choupaty sands and the base of the gigantic statue erected to the memory of Bal Gangadhar Tilak, the great Nationalist leader, on which are inscribed the words *SWARAJ IS MY BIRTHRIGHT*. There lies the sanction and inspiration of the present Nationalist movement. This ancient people with 5,000 years of history behind it, is alive and on the march. India is discovering herself, and with that discovery is coming a new sense of self-respect, national dignity, and national destiny. She sees China free and independent, honoured and respected among the nations. She sees Russia, largely an Asiatic Power, pointing the way to economic emancipation. She sees her fighting men holding their own with the flower of the British Army and, proud of her glorious past, she claims to be treated as an equal among the great families of mankind and given an opportunity to make her distinctive contribution to the common good. So when she asks for independence she asks not for a favour, but for an inherent right. Nor does she ask for independence in instalments; she wants it whole. In staking her claim she is neither unmindful of nor ungrateful for the benefits that have come to her from her long connection with Great Britain.

Complete independence does not imply isolation. Indian leaders recognize that their country cannot stand alone at least until the Kingdom of Heaven or a new order of brotherhood displaces the present acquisitive tendencies of men and nations and they therefore look to partnership in some larger federation of nations. Her coasts and frontiers must be guarded from attack, markets must be found for her produce, her culture gives her a right to contribute to the moral and intellectual progress of the race occupying as she does a strategic place on international highways between East and West. It is unthinkable that she will or can play a lone hand. I am convinced both for practical and sentimental reasons that India's political destiny lies in a free and equal partnership in the British Commonwealth of Nations and although there are those who look to partnership in a new alignment of nations comprised, say of India, China and Russia, I cherish the conviction that the present clouds of suspicion and estrangement will lift and India by her own free choice will elect to remain with us and share a common destiny.

THE DEADLOCK

I will not bore you with a discourse on the present deadlock but I may be pardoned a few reflections. In the first place it appears that we and India do not understand each other, and the more we give advice to each other across the seas the more our misunderstanding grows. Personal contact rather than long-distance correspondence would avail much.

The present bitterness and suspicion are largely due to this lack of understanding. There has grown up in India even in circles friendly to this country a belief that we do not mean what we say and that, notwithstanding our protestations to the contrary we are not willing to part with power. Further it is suggested that our reluctance to part with power springs from our distrust of Indian ability to manage Indian affairs. Time and again Indian friends have asked me if I really believe that the declaration of British policy made by Sir Stafford Cripps was genuine and when I have answered

Most certainly they have usually replied: We are glad to hear you say that but we think there must be a snag somewhere. We can always of course adopt the heroic attitude of "They say. What say they?" Let them say but the heroic way is not always the way of wise statesmanship. There is the way advocated by a group of British missionaries, of unrestricted conference, in which all the party leaders, including those now interned, should be invited to participate.

I share the widespread regret that the negotiations between Mahatma Gandhi and Mr. Jinnah have broken down but the ice has been broken and at any rate we see clearly now that Pakistan as interpreted by the latter means the partition of India. Since this fundamental problem has its roots in race and religion, no effort of British statesmanship and no prolonged extension of British administration can resolve it. Wisdom would therefore seem to lie in leaving its solution to Indian hands. The risks are certainly grave, but I cannot reconcile myself to the view that Britain must stand perpetually on guard to keep the peace in India, and I cast the anchor of my faith in the good sense of the Indian people. To those who anticipate civil war I venture to pass on Disraeli's famous epigram that it is the unexpected that happens.

Much depends on the framing of the new Indian Constitution. The approach of independence has accentuated the demand for security by various communities who are determined that their place in the new India is made sure. India has a great regard for the law as such, and a profound faith in the integrity of the High Court. If therefore the rights of these communities are given statutory recognition in the Constitution that should go far to lay the spectre of civil war and raise a bulwark against chaos. India may have to divide or at any rate readjust its boundaries on the principle of Pakistan but that should not rule out the ideal of an Indian Union as envisaged by Sir Stafford Cripps. Complete unity may not be feasible but an understanding such as will enable all the parties to come into conference is surely within the range of practical politics.

THE RURAL MASSES

Let us now leave the political scene and turn to Rural Reconstruction. It is obvious that if India is to hold her own among the nations her standards of living must be raised and in this regard the peasant is the key man. Rural Reconstruction is usually defined as the rebuilding and reconditioning of rural life in keeping with the dignity of personality and the requirements of our modern day. As all the world knows India is pre-eminently an agricultural country although as all the world should know she has definitely entered her industrial age, and her iron and steel works at Tatanagar in Bihar are the second largest in the world and the peasant is therefore the man that matters most. The day is coming when this same peasant through the prerogative of the franchise will give effect to Mahatma Gandhi's famous prediction that the future of India will be settled not by her cities but by her villages. But all is not well with the 700,000 villages of India. Poverty, debt, disease and illiteracy hold the villager in thrall and freeze the genial current of his soul. To create and maintain a better order of rural living or as Ruskin put it 'the manufacture of souls of good quality' is the task of rural reconstruction.

This illuminating word from Dr. Bhabindranath Lahore states the problem clearly.

Today for various reasons villages are fatally neglected. They are fast degenerating into serfdom and compelled to offer to the ungrateful towns cheerless and unintelligent labour for work carried on in an unhealthy and impoverished environment. The object of Sriniketan is to bring back life in its completeness into the villages making them self-reliant and self-respectful acquainted with the cultural tradition of their own country and competent to make an efficient use of the modern resources for the improvement of their physical, intellectual and economic condition.

To bring back life in its completeness into the Indian village is the goal. That implies the recovery of a lost ideal when the village was a self-contained community organized on the basis of service, when the priest, teacher and banker were as much the servants of the community as the carpenter, blacksmith and barber when the mahajan was held in honour and the panchayat was a power in the land. In the light of that vanished golden rural age the primary purpose of rural reconstruction is to be understood in terms of re-creation but the creation of a better order of rural living achieved by breaking virgin soil is not ruled out. There are stretches of desert and jungle waiting to be reclaimed and peopled. With this latter form of rural reconstruction I wish to deal today. I need not remind you that the importance of this subject has been immensely enhanced by the amazing increase in the population. Nothing is more impressive in our modern day than the will to live of the Indian people. Divided by race, religion and social convention, harassed by war within and without, struggling against poverty, disease and famine, this ancient people lives on and adds 50 millions every decade to its already colossal numerical stature. Therein lies a problem that will tax the highest statesmanship.

RECLAMATION IN THE SUNDARBANS

Let me now briefly describe rural reconstruction as I have seen it in action and in doing so I invite you to visit the well-known co-operative commonwealth of Gosaba.

in the Sundarbans district of Bengal, founded by the late Sir Daniel Hamilton, a Calcutta business man who had a taste for farming and a desire to help the man who was denied the chance to earn an honest livelihood. Acquiring on favourable terms, and on leases for forty years, four concessions of salt-sodden cane jungle land, infested by tigers and crocodiles amounting to 22,000 acres, he set himself to the titanic task of making them fit for human habitation. That was in 1903. The residents then were a few wood-cutters and a few hunters, who shared the amenities of the jungle with the tiger and crocodile. But the scene has changed. Instead of tiger and crocodile has sprung up a self-respecting peasantry 16,000 strong. The jungle has given place to fields of grain, and the rice of Gosaba ranks high in the markets of Bengal.

The work of reclamation was done in stretches. As the ground was cleared the labourers were given the option of settling on it. Economic holdings were apportioned to them, and, to enable them to begin farming, loans to the extent of £20 each were advanced by the estate on equitable terms of repayment. All the settlers did not make good, but remembering the frail material out of which they had been hewn this was not surprising. The important thing is that Gosaba has given to many of the disinherited, irrespective of class or creed, a chance to rise to the dignity of manhood.

CO-OPERATIVE CREDIT

In building up the colony Sir Daniel Hamilton, who regarded bad finance as the root of all India's economic ills, employed the co-operative method. I need not remind you that the heavy incidence of indebtedness among the peasantry due largely to borrowing at high rates of interest, was responsible for co-operation in India following the Raiffeisen model with its emphasis on credit and its concern for the producer rather than the consumer. By allying his credit to that of a dozen or more of his neighbours co-operation makes the peasant his own banker. brings the ready money he needs at economic rates of interest within his reach, and thus provides an alternative system of finance to that of the otherwise indispensable money lender. It is futile to rail against the mahajan unless you can provide something better in his place. But we shall see as we study Gosaba that co-operation is something bigger than finance. It is a way whereby the peasants of India can unite to raise the whole standard of living in the country.

How co-operation came to Gosaba is a great story. One of the sights of the colony is old Arjoon Mondol, with his happy homestead, his well filled threshing floor, his thriving cottage garden, his bank balance, and his silver mounted staff presented to him by Lord Ronaldshay (now Lord Zetland) when Governor of Bengal, to drive away money lenders. In 1911 Arjoon was in the grip of a money lender, an original loan of Rs 50 having swollen by compound interest and other devious devices to Rs 500. His story moved Sir Daniel to action. Gosaba could not prosper half-slave half-free. So he resolved to liquidate the money lender and thus he could only do by advancing the Rs 500, for strong in his legal position the mahajan insisted on the bond and nothing but the bond. The advance was made and in five years Arjoon had paid it all back plus a modest rate of interest. Other tenants in similar plight were dealt with in the same way by buying out the money lenders, who were driven to seek pastures new. There was no moaning at the bar when they put out to sea! Their place was taken by the co-operative banking system which in this congenial soil reached a pitch of excellence unexcelled in India.

In Gosaba we see a master purpose—the manufacture of souls of good quality—united to a master method. As villages came into being they were promptly organized into co-operative societies. Every village a bank and every village a school was the slogan. At first the estate advanced the capital but as the number of societies increased a Central Co-operative Bank was established and became the financing and supervising authority. The village societies now number twenty-four with a working capital of £3,000 and reserve funds amounting to £2,000.

Gradually co-operation moved beyond banking into a united endeavour to meet the needs of the whole man, producer and consumer alike. In keeping with this natural trend, a central co-operative store was organized and soon did a thriving business. To crown all came the co-operative rice-mill, whose chumney is the first

glimpse of Gosaba that greets the incoming voyager. The mill is on the share basis and belongs to the people themselves, there being 600 shareholders. Here the great problem of marketing is handled. The cultivators supply their grain to the mill at prevailing market rates; the mill gives a bond to the Central Bank for the amount to be paid; the bank credits this to the village society which in turn pays it over to the member after deducting what may be due to the society. In this same process the tenant's rent and his co-operative bank dues are realized and the accumulation of arrears that has broken the back of the co-operative banking system in many parts of India is averted. The link with the outside commercial world is the Central Co-operative Paddy Sale Society of Calcutta in which Gosaba is the predominant partner.

SUPPORT OF ESSENTIAL SERVICES

Gosaba stands for a rural philosophy which may be stated in this way: rightly organized a task only the State can adequately undertake; the people of rural India should be able to support the essential services of education, medicine, agricultural research, banking and all else necessary to rural well-being; and at the same time, provide employment for an army of educated men and women. So in this co-operative commonwealth is to be found an education service which includes a network of twenty-one village schools, twenty night schools, a middle school and an incipient high school. At the centre is a weaving school and an experimental farm. The day schools have an attendance of 850 scholars and the night schools 400; co-education being the rule of the colony. Each school has its weaving, farming and gardening activities. Fitting into this general scheme of human engineering is a health service manned by four doctors, one of whom—and he the least expensive—is a homoeopath, three nurses and three dispensaries; the expense of all these services being met by the people themselves in the form of a small cess added to the rent.

Time fails to describe the institutions of Gosaba, but mention must be made of the Rural Reconstruction Institute with its austere motto: Fear God, work hard, be honest. Here young men are educated for rural life and service. When they qualify, after two years of training, they are given the degree of Master of the Art of Independent Livelihood—a degree unique in the annals of education. What I have given is a very inadequate account of a great rural experiment in which East and West combine to demonstrate that where there is a will to lift the burden of poverty and debt from the brow of the Indian peasant a way can be found.

Will the achievement last? The question is inevitable and while the final word cannot yet be spoken, this at least is plain: the experiment is there for all to see. During these four testing years of war, with their labour and transport difficulties, with rumours of impending Japanese invasion clouding the sky, Gosaba stood firm and gave place neither to fear nor to doubt in the ultimate victory of the Allies. Writing on December 23 of last year with reference to the devastating famine that had stalked across Bengal, Mr. Mazumdar, the present manager, gave this cheering news: Despite great food scarcity in the Province, Gosaba could manage without much difficulty. Gosaba had enough and to spare and what it had to spare it generously shared with its less fortunate neighbours. This is a fine tribute to the foresight of the founder of the colony and the value of organization.

RECONSTRUCTION IN ACTION

But some will still ask: Will the work go forward with the same efficiency as the memory of its founder fades with the passing years? Sir Daniel died in December 1939, and since that time the work has been in trusted Bengali hands. In answer to the question it can be pointed out that the people are coming to understand and appreciate the principles and practice of co-operation. These co-operators of Gosaba do not lack confidence, and this is their slogan. What Gosaba thinks today Bengal will think tomorrow and what Bengal thinks tomorrow the rest of India will think the day after. In the schools and on the land the future citizens are learning by head and by heart to do unto others as they would that others should do unto them.

This, then, is rural reconstruction in action. In school and garden, in weaving

shed and cottage industry in field and factory in hospital and bank, in reclaiming jungle and building houses, in thinking and planning together the manufacture of souls of good quality goes on, inspired by the great motto Fear God work hard, be honest. There are many such centres in India all pointing the way to the development of a true nationhood, the redemption of India's birthright.

DISCUSSION ON THE FOREGOING PAPER

The CHAIRMAN said that Dr Hodge went out to India in 1900 and left it only about a year ago. Up to 1929 he was engaged in district missionary work. Incidentally his own experience was that few had such opportunities to know the heart of India as had missionaries. In 1929 he became secretary of the National Christian Council of India, Burma and Ceylon, retiring in 1941 and since then he had been giving all his experience and time to smoothing away the difficulties which beset India. In this work he had brought to bear the disinterestedness and sympathy without which in India one saw very little and understood nothing.

Dr HODGE then read his paper.

The CHAIRMAN after thanking Dr Hodge for his very inspiring lecture said that it fell into two portions—one dealing with the political situation and the other with specific rural problems. He himself was not very competent to speak in the political field but as Dr Hodge had given a good part of his address to that subject he felt that he must say something.

The present political position must cause all of them considerable misgivings. He was glad however to learn that day that a new appeal had been made to all parties by Sir Mirza Ismail to get together and form a constituent committee to deal with the new situation. Sir Mirza said that all parties were in a somewhat chastened mood, and he (the Chairman) thought that applied to themselves also. When one looked at the present situation and thought of it as a result of 150 years of British rule one could hardly help feeling a little chastened. At the same time when Dr Hodge suggested that the settlement of this problem be left in Indian hands he wondered whether that was altogether a satisfactory or sufficient way of dealing with the question. He felt that the British Government was under some obligation to lend a hand too. He had his own views as to what might be done, but he was not going to impose them upon the meeting. We must, he thought, do our best according to such experience and wisdom as we still had, to help India in this respect.

Turning to the field of rural reconstruction in which he felt a little more at home he was glad to see that the author spoke of the peasant as a key man. He had no doubt that he was a key man. He also agreed with his quotation from Ruskin that their object must be to manufacture souls of good quality but he did not altogether agree with Sir Rabindranath Tagore that villages were fatally neglected. That was certainly not the case with wide areas in India including his own Province of the Punjab and when he went round India ten years ago it was not the aspect which struck him most. There could be no doubt, however that the peasant was quite unfitted at present to deal with the modern world.

Dr Hodge had given an extremely interesting account of a successful experiment made by a Scotsman who brought an unusual combination of business acumen, experience and great disinterestedness to bear upon this difficult problem of rural reconstruction. He himself had the good fortune to visit Gosaba ten years ago and

he was struck by one thing Sir Daniel Hamilton said to him apropos of another large estate he had in the West of Scotland—namely that his Scottish tenants gave him much more trouble than his tenants in Bengal.

Dr Hodge had spoken of a master purpose united to a master method. When both these things were found united to a master hand the result was certainly remarkable. Sir Daniel Hamilton was something of a despot although certainly a benevolent one and he would not tolerate anything which was likely to upset the happiness of the whole estate. Unfortunately men like Sir Daniel and a few others he could name, one of them an Indian landlord in the Punjab were not too common in India and the problem itself as a whole was one that initially at least had to be dealt with by the State. How indeed were the plans now appearing to be applied to a vast population which as the paper suggested was riddled with disease and ignorance? That was an aspect of the problem which did not seem to have been very completely faced in the plans that he had seen and he hoped subsequent speakers would touch on it.

There was one other question he would particularly like considered. Science was now ready to put all the means for improving conditions in India at our disposal. Was it necessary to wait until a political settlement was reached before applying them? His own mind was not altogether made up on that point. Some people said that they must go ahead at once irrespective of a political settlement while others said that without a national backing success could not be achieved. His own feeling on the whole was that the needs of India were so enormous that they could not afford to wait.

The BISHOP OF RANGOON said that Dr Hodge had been in India for forty years and he himself had been there for more than twenty, and in the same neighbourhood and yet this was the first time they had seen each other. He had been extremely interested in the paper as he had himself spent seven years in a village miles away from anywhere and had attempted to do the very thing which was described in this paper. So much was heard just now of the problems of the world and of India itself that it was quite a relief to come to a gathering like the present which was not only problem-conscious but answer-conscious and the more they saw their way through to giving the answer the better it was going to be for the post-war world. Might it not be that the answer to both the questions treated in the paper—the political question and rural reconstruction—would arise in some totally unexpected area? He wondered whether they had heard the story of the teacher who posed a problem to his class. There were thirteen sheep in a pen and seven jumped out. How many were left? One of the boys said 'None sir' and when his teacher rebuked him for his deficient arithmetic and told him he knew nothing about figures his reply was, 'Sir you know nothing about sheep.' It might be that the answer to the Indian problem lay in another realm. He once overheard a conversation between a Burmese woman and an English woman. The latter said 'I cannot understand why you do not like us. Look what we have given your country—railways, irrigation, education, hospitals.' Said the Burmese woman 'I for my part am grateful and I think my people are for all those things. But have you given us your hearts?' There was a long healthy silence after that question. Was it impossible to suppose that something of that kind might yet transform the situation? Only the previous day he was talking about this to an Indian who had come over to this country with strong nationalistic feelings but since he had been here he had discovered what an amount of bitterness was bound up with his nationalism, and when he faced that and had it out with himself he found that he could love this country. It was still possible to win the heart of India and make her our friend. He believed that the Indians were the most responsive people in the world and if the right chord was touched all sorts of things could happen. If only India were made our friend what an asset she would be at the peace table and moreover she would be saved from all sorts of sinister forces which threatened her with disaster.

Brigadier F. L. BRAYNE said that he had met Sir Daniel Hamilton and had heard from him about his great enterprise. One question which arose was whether this ex-

perment would lapse. There was a very large number of simple things the doing of which would make all the difference to the health, welfare and happiness of the villages of India, but when the person who started them had to go away there was usually no continuity and the enterprise faded out. Some most interesting work had been done on the old Skinner estate within fifty miles of Delhi. For twenty years this estate had been farmed in the most modern way possible. The system of collection and disposal of manure which was employed there was probably a model to the whole world. But now the estate had been sold, and moreover by great generosity sold to the tenants at pre-war prices, and thanks to the good farming and to war prices they were able to collect the money within six months; but, now that the estate had been broken up, the whole of this work was threatened with disappearance. Previously the energetic influence had been the landlord and under his orders the tenants did as they were told, but now that they were free to do as they liked the whole thing was ready to collapse, and unless some sort of trust was formed to hold them together this interesting piece of work would disappear.

Government of course, particularly autonomous Provincial Ministries, must make this work a big part of their programmes, as they did in other countries. Apart from that, to secure continuity two things were absolutely essential. One of these—namely, some form of co-operative system—was fully appreciated at Gosaba. There should be a network of co-operative societies for all needs and purposes, adequately staffed and supervised. The other thing which was necessary was to bring the women into this business. Civilization was a matter of homes and homes were a matter for women. Until the women came in on this programme the men would be helpless, but for some reason officials could not be made to believe that women were of any use at all in this matter. It seemed impossible to persuade officials in India that women's work offered the basis of all progress. The Army in India was actually more progressive than the civil authority in this respect. Every married line in India in a pre-war unit or training centre included a welfare centre for the women. The men had their institutions and arrangements for learning farming and the management of animals, but the women of India had no place where they could learn their equally important work. It was true there were a few domestic training centres in the United Provinces and in the Punjab, but these were exceptional and in general there was no provision in India for teaching the village women how to run a home and bring up children. And yet the success of all post-war planning depended on their being able to do their share of the work of raising the standard of living.

Sir JOHN HUBBACK said that it had been a very great pleasure to meet Dr Hodge again and hear his eloquent paper. Dr Hodge and he served together some fifteen years ago on a provincial banking inquiry committee, and certainly he (the speaker) and possibly Dr Hodge also were not very well acquainted with banking, but Dr Hodge soon proved himself a most valuable member. In his few remarks he wished to concentrate on rural reconstruction. The interesting part of the paper was the description of what had been done at Gosaba under the inspiration and guidance of Sir Daniel Hamilton. He was sorry that he had never managed to get there himself. He had always heard what an extremely good organization it was. But in order to deal with the 320 million peasants in India something like 20,000 Daniel Hamiltons or their equivalent would be necessary. One interesting thing was the way in which Daniel Hamilton managed to get no fewer than four doctors and three nurses to serve in an area of only 34 square miles. His own experience was that it was practically impossible to get the young Indian medical student who had just been qualified, still less the medical man of more experience, to go out and live in the villages.

It was extremely cheering to find a place where the co-operative system had really succeeded anywhere else except in the Punjab, and it would be useful to hear how it was managed. It was said somewhat flamboyantly that co-operation was the one hope for Indian agriculture. What he would like to know was whether these societies had taken advantage of the good prices for agricultural produce to clear off their own heavy burden of debt. It was of no use going back to the old practice of trying to run a co-operative banking system on the basis of borrowing at 8 per cent. from the middle classes and lending to one's members at 18½ per cent. He had heard

ardent co-operators describe that as a reasonable rate of interest. An enormous amount of work remained to be done and it was time to start doing it. Time would not automatically run back and fetch the age of gold, and there was great danger of a very serious catastrophe on the economic side in India. He hoped that what Gosaba thought today Bengal would think tomorrow and India the day after. But another quotation came into his mind, and unless Indian public men were wiser than they sometimes showed themselves to be it might have a tragic aptness

Tomorrow and tomorrow and tomorrow
Creeps on with petty pace from day to day,

And all our yesterdays have lighted fools
The way to dusty death

Mr CHINNA DURAI said that there seemed to be no immediate prospect of a solution of the political troubles of India. What, then, of the prospect of rural reconstruction? What came into his mind in this connection was not something abstract, but millions and millions of peasants and workers—illiterate poverty stricken toiling and suffering—who make up the real India which was rural India. It was folly to think that their welfare which was a crying necessity could be tackled by their more fortunate brethren—namely responsible Indians—only when India obtained 100 per cent self government. It was a mistake that Indian nationalists threw away the chance of helping rural India when agriculture was entrusted to Indian hands responsible to Indian electorates according to the Act of 1935. His own view was that every opportunity that came in the way of Indians however small it might be must be seized with both hands with a view to help make India a happier and more prosperous land. There was now the suggestion of a Constituent Assembly by Sir Mirza Ismail. The success of this or any other assembly that came into being would depend very much on the spirit that Indians of various parties and sections imported into it. India, fortunately today was in a chastened mood and ready and willing to accept anything that offered whereby the cause of India might be helped. This indeed augured well for the future of India.

Mr HORACE ALEXANDER said that it seemed to him that Dr Hodge had got very near to the heart of the matter when he suggested that personal contact was better than long-distance correspondence. In India perhaps more than in other countries personal contact was of the utmost importance. By personal contact he did not mean necessarily that the Viceroy should invite Mr Gandhi and Mr Jinnah to go and see him tomorrow. Was it not likely that in such an intractable situation as this some sort of background work was first needed. He could himself suggest the names of some Indians and probably of some Englishmen associated with them who could do a great deal of useful background work in order to try to find a way through the present conflict. Some step of that kind was quite urgently needed.

He must not follow Dr Hodge into the intricacies of the economic question but he desired to make one comment. Dr Hodge had given them a most illuminating account of the work at Gosaba but he supposed it was his modesty which prevented him from telling them about the co-operative work he himself had done in another Province. Those who read his book *Salute to India* would find an illuminating account of the work he had done in that sphere. They had been reminded of the difficulties which lay in the path of anyone who attempted this tremendous task of rural reconstruction but they all agreed whatever the plan of action might be, that it was intensely urgent, and Sir Albert Howard in the current number of the *Asiatic Review* gave a very hopeful picture of what could be done without an immense outlay of capital. They were constantly reading in the press about the conflict between this party and that party. The paramount conflict today was between those who were prepared just to let things slide and those who were determined—should he say?—to double the output of India. He added a testimony out of his recent experience of the admirable work done by Calcutta students some of whom had been prepared to bury themselves in these stricken villages and to work day in and day out on their behalf.

He thought that a combined attack should be made on the political and economic problems

Mr K H HENDERSON said that it might be of some interest to those present to learn what had been happening in the Punjab. At the time he left Lahore Mr Jinnah had been engaged on his great attempt to convert the Punjab to Pakistan. He met with a very great defeat, and speaking from his own knowledge of Punjab politics he did not think that Pakistan had been a live issue in the Punjab, and without the Punjab Pakistan was useless. One thing which the war had taught them was the integrity of India. The various Provinces depended upon each other and without some form of central government he did not see how the economics of India were going to work. He agreed that personal contact and friendship mattered greatly. He rather disagreed with the public conference method and, indeed, he thought it would be a very good thing if they all kept quiet and turned a little to diplomacy deciding how far they could agree at the dinner table and the tea table before undertaking the large publicized conferences. If they were prepared to do the groundwork in a friendly spirit they need not be afraid of that awful word suspect. A stranger might be suspect to start with but one never suspected one's friends. If a few of the Indian leaders were made their friends and could be shown that they were working for them there could be nothing suspect. But it would take time and it could not be done at public conferences.

In a brief reply Dr Hodge reiterated his belief that the only way to break the present political deadlock was to bring all the party leaders including those still interned into an unrestricted conference, and in calling such a conference he thought that the initiative lay with Government. He did not think private negotiations would carry very far.

Paying a tribute to his old friend Sir John Hubback whose concern for the well being of the Indian peasant was as great as his own he reminded him that the widespread spirit of social service had done much to remove the doubt that India's educated young men and women would give themselves to service in rural areas. He pointed out that the scheme for a higher grade Christian medical college was based on the conviction that highly trained Indian doctors and nurses would take up rural medical service.

Sir HENRY CRAIK voiced the thanks of the meeting to Dr Hodge for his paper and to Sir Malcolm Darling for his chairmanship. The opening sentences of Dr Hodge's paper had captured his sympathy when he said that he could never sufficiently repay the debt of kindness he owed to the people of India. As one who had lived in India even longer than Dr Hodge, Sir Henry agreed entirely with this sentiment though with certain other parts of the paper he did not agree altogether, while appreciating as they all must do Dr Hodge's deep personal knowledge of the subject and the great enthusiasm and sympathy which he had brought to bear on this kind of work.

They had also been fortunate in having had as their chairman that afternoon Sir Malcolm Darling, who was one of the greatest living authorities on rural co-operation and whose work had brought material benefits of an almost incalculable value to the peasantry of the Punjab.

He added a word of appreciation of the remarks of some of those who had spoken subsequently, especially the striking and refreshing remarks of Mr Henderson—a young officer with whose work he had reason to be well acquainted because he selected him for the post he was now holding and to whom he had reason to be grateful for the way in which he had carried out his task in this particularly difficult appointment. Mr Henderson's remarks about Pakistan presented a novel and extremely interesting point of view.

BROADCASTING TO INDIA SOME LESSONS OF WAR EXPERIENCE

BY PROFESSOR L. F. RUSHBROOK WILLIAMS, C.B.E., J.P.

MAY I be allowed to begin by making clear the limitations of this paper? I can only attempt to cover one single aspect of the question of the actual and potential radio relationship between India and Britain—the aspect which deals with the problems of broadcasting from this country to India. For it is only in connection with this one angle that I have any personal experience. But I do wish to make it clear that I am conscious of the scope as well as of the importance of the whole matter.

If I am obliged to pass over with the barest mention the part that radio may play in many spheres of Indian national reconstruction it is not because I rate this part low. Again if I say little or nothing about radio as an instrument of mass education in India it is not because I do not realize its potentialities. Both these topics are of immense importance. But they are primarily domestic to India; they are national rather than international in the nature of the problems they pose. And it is with the international sphere that I am mostly concerned. But even here there are numerous aspects complementary to the one which I am treating which cannot be ignored. Who can measure the possibilities which radio offers for the creation of a better understanding between the people of this country and the people of India? Yet these possibilities do not depend only upon sending broadcasts of the right kind from Britain to India. There is also the reverse aspect—the sending of broadcasts of the right kind from India to Britain. Nor does this exhaust the matter. It is not enough to push out broadcasts upon the long suffering air; one must ensure that people who may happen to want to hear them shall be able to do so.

TECHNICAL PROBLEMS

At this point a number of technical considerations are involved. When broadcasts come from six thousand miles away they must come by short wave and if they are to be heard by any considerable number of listeners one of two things is necessary. Either these listeners must have access to receivers with a good short wave performance and be able to use these receivers with some little skill, or they must be able to hear the original short wave broadcast relayed on long short wave or medium wave from their local station, so that it can be picked up by a simple easily tuned set or better still by a public address system. This means that international broadcasting on short wave is limited in its influence for good unless it is backed up by national broadcasting on long short wave or medium wave.

Particularly is this the case with countries so widely separated as Britain and India. For despite the technical progress made by radio engineers of late, the reception of short wave broadcasts, even on expensive sets is liable to be interfered with by sun spots, by monsoon conditions or even by the daily disturbances connected with dawn and dusk. These difficulties do not, of course, deter either the radio enthusiast or the man who wants to hear a thing badly enough such as the broker seeking the closing prices in London or Liverpool. Nor, indeed do they frustrate the exile whether in India or in England, who is determined to hear the voice of his own country and of his own people. But by and large they are a pretty effective discouragement to the kind of easy-chair listening which represents the degree of personal exertion so many of us in these busy times can devote to understanding another nation, and the best way to obviate this discouragement is to embody the original short-wave broadcast in the listener's own long wave or medium wave programme. This can be done by a direct relay of the short-wave broadcast as it is received, by recording it and putting it out after an appropriate interval or even by making use of what are called *transcriptions*—that is, broadcasts supplied tailor made, not over the ether but in already recorded form. But in each case time must obviously be found within the limitations of the local service, a fact which raises all

kinds of problems of programme planning in which national needs and tastes complicate the allocation of time as between domestic and international items.

This means, in effect, that the power of broadcasting to promote goodwill between two countries as far apart as Britain and India depends quite as much upon those sections of the respective radio organisations which look after home programmes as upon the sections whose business it is to ensure that suitable broadcasts are sent overseas. For unless those who plan the domestic programmes in each country are both able and willing to play ball in the cause of international understanding the poor overseas broadcaster will find that his only listeners are those who have access to suitable short wave receivers which can alone tune in direct to the station from which he is speaking. I should be interested to know whether my audience agrees with me in this, or whether they think that the bulk of listening to Britain in India will always be confined to listening on short-wave sets but that eventually there will be so many of these that local rebroadcasting will not count for very much.

WAR TIME LIMITATIONS

I should like to stress here what I have just said about the domestic programme planners being *both* able and willing to include international broadcasts in their home programmes. My own experience in the B B C, combined with the ready co-operation I have received in so many matters from All India Radio leads me to believe that the willingness can almost be taken for granted. But the ability depends upon so many factors. Some of these are technical. I know for a fact that the Home Service of the B B C would welcome the inclusion in their programmes of more items from All India Radio. But the security requirements of the war have concentrated the appeal of radio to the listener in Britain into just two channels—one main service and one alternative. The range of interests to be covered is so wide, and the standing obligations of the B B C in various directions are so clear-cut, that there just is not room for anything but very exceptional items from India.

There is the further difficulty that until lately India has not been able to send to Britain a signal as the engineers call it, which is strong enough to make reception in this country reasonably reliable in all atmospheric conditions. Few things are more heart breaking than to make elaborate arrangements with All India Radio for the transmission here of some special item of great interest, and then to find when the Home Service has been eagerly awaiting it, that it comes through so badly that it cannot be understood in Broadcasting House, let alone relayed to Home listeners! I hope very much that the new and powerful stations now in course of completion in India will remedy this, but, in the nature of things reception across six thousand miles is likely to be chancy. Perhaps members of the audience who have direct experience of listening at the Indian end would give us the benefit of their personal impressions?

Again, if we consider the Indian end there are parallel, though not quite identical difficulties. The signal from Britain is on the whole pretty good—it has been much improved even during the last two or three years—although it is still not cent per cent predictable. But All India Radio like the B B C has a number of direct obligations connected with the war which must take first place. It has to allot much of its technical equipment to the needs of political warfare against Japan. And in the domestic field also it has many obligations. For example, it assumes—and rightly assumes in my view—the prime responsibility for broadcasting in the Indian vernacular languages, and these take pride of place in the allocation of time both in New Delhi and in the local stations. Again, it has to help the American forces in India, for by some unfortunate natural freak the radio channel between the United States and India is so bad that no direct programmes are possible. All India Radio has stepped into the breach by putting out recorded programmes sent by air from the States, but this, of course, is a further elimination of time that might be available for other things. The B B C, incidentally, also helps in this field, and it is pleasant to be able to note that Britain constitutes the main radio link between the American forces in India as well as on the continent of Europe, and their own homeland.

India, unlike Britain, still enjoys the advantage of a number of local services in addition to the main All India transmissions, and local station directors are often able

to use broadcasts from Britain for which the New Delhi station cannot find room. Moreover the radio stations of several Indian States, such as Hyderabad and Mysore, constitute additional channels for certain British broadcasts. Britain cannot decentralize at present, but I do hope that when peace comes and the B B C has its local services again there will be a steady stream of items from India available to the listener here. For in all these matters reciprocity counts for a good deal, and it must be discouraging for the authorities of All India Radio to compare the steady if still small, trickle of British broadcasts which they are able to relay to their listeners on long and medium wave with the virtual absence of reciprocal items in our own domestic programmes. But I am quite sure that they know the reason and will be indulgent to us so long as the war lasts. When peace comes I hope we shall make every effort to do for Indian broadcasts at least as much as India is already doing for British broadcasts. It would be interesting if time allowed, to speculate upon the kind of Indian broadcasts that would be most suitable for the needs and tastes of British listeners, but I cannot pause to do so. Perhaps my audience may have some ideas which can be discussed after this paper has come to an end?

I regret that my own three years' experience with the B B C was served under war conditions for I am not sure that the exceptional circumstances have made me a good judge of what will be found either possible or desirable when the stress has passed away. But in many respects and not least in the all important field of radio engineering progress has been so rapid that we have now many more opportunities of using radio to promote understanding between the two countries than have ever previously existed. It is for us to make the right use of them, and as I have tried to show this is by no means a simple matter, and we shall only be laying up trouble as well as disappointment for ourselves if we fail to realize its complexity. But at least peace will find us furnished with two things: an effective both ways channel between Britain and India, and a certain amount of experience which will be valuable to us if we rightly interpret it.

BROADCASTING IN MANY TONGUES

It is sometimes said that there were no broadcasts from Britain to India before the war but this is not quite correct. As long ago as 1932 the B B C had an Empire service in English which was much appreciated by both Indians and Europeans who were fortunate enough to possess powerful receiving sets. But as its name implies it was mainly intended to link up Britain with the Dominions and Colonies and it made no pretence of specific appeal to Indians. Then came the war, when Britain was as inferior to her adversaries save in certain limited fields in her command of the international ether as she was in more material respects. Gradually the balance has been redressed and the overseas services of the B B C are now at least as well specialized as and I think, a good deal more effective than the Axis networks. But today, when the B B C broadcasts daily in half a hundred languages it is useful to remember that only in 1938 was the first foreign language broadcast put out. The great bulk of the experience gained in foreign language transmissions has been acquired under the stress of war and, indeed, under the direct pressure of war needs.

As a result, specialization in the wants of listeners of different nationalities has gone hand in hand with specialization in the languages these nationalities speak. Now I am not sure that this is necessarily a good thing in peace time however useful it may be during the war. Let me give a specific illustration. I think that in broadcasting to India from London it is quite vital to find out what Indian listeners want to hear and also sometimes what they need to hear if their picture of a problem is to be complete. But I do not think that it is always an advantage that they should normally hear it from London direct in an Indian language. If it is really worth hearing, English is quite sufficiently well known to bring it to the attention of a very large and influential class of listener, while the experts in All India Radio can turn it quickly and accurately into a far greater number of languages than London can hope to cover. Nevertheless, under the pressure of war-time conditions I found myself that I was compelled to increase the number of hours in which London addressed India in Indian languages. This was in part due to the fact that the Axis used such a large number of these languages in its dangerous anti Allied propaganda,

and partly also to the fact that London was the main source both for war news and for war commentary

A PASSING PHASE

There was thus a real need to supplement from Britain in several languages the admirable work that All India Radio was itself doing. For the central position of London as a source of news and comment gives London broadcasts a particular kind of authority for which there is in war time no real substitute. But I am pretty clear in my own mind that this careful plan of Indian vernacular broadcasts from London has no future after the last shot has been fired. For one thing there is altogether too much risk of trenching upon what should really be the exclusive province of All India Radio. For another, there will be duplication, which means waste of effort and resources. And it is not without interest to observe that during my three years the most outstanding broadcasts from this country, if one can judge by the opinions received from India, were mostly delivered in English, either by Indians themselves or by Englishmen selected and presented to the microphone by Indians. Now that I am no longer an officer of the B B C I should like to pay tribute to the really admirable way in which the Indian Section of the Eastern Service have contributed to the information of their own countrymen. In my judgment they have deserved well of the whole United Nations. I think also they have shown that broadcasting from Britain to India depends for its success upon that kind of expert guidance which Indians themselves can alone supply, both in the selection of material and in its proper presentation to the audience.

In saying this I must not be understood to reflect in any way upon the excellence of the present Indian language broadcasts from London. What I do maintain is that the need for them arose with and is likely to perish with the war. Take for example the various programmes devised for Indian forces. It fell to my lot to provide programmes not only for Indian forces in this country but also for Indian forces in the Mediterranean and Middle East. These programmes were—and, I expect are—enormously popular and the “fan mail” of Princess Indira of Kapurthala who compered them, was in my time phenomenal. But their very existence was due to the horrid fact that these Indian forces were outside the range of New Delhi radio and so could not listen to any Indian station. We were proud to do what we did but we knew that only the limitation of All India Radio’s technical resources—a limitation which I hope will soon be redressed—prevented All India Radio from doing the job themselves.

But there are certain other elements in the present system of broadcasting from Britain to India which are likely, I think, to have permanent value after the war. To begin with there is the assembly in London of a highly competent Indian personnel. I believe that Britain will always need them if she is to broadcast successfully to India. Indeed I dream of a regular exchange of personnel between the B B C and All India Radio to the great advantage of both organizations. Only by some such device can London be sure of sending to India the items that All India Radio can joyfully relay and can Delhi broadcast to London in the knowledge that the transmission is exactly what the B B C are waiting for.

THE RÔLE OF THE BROADCASTS TO INDIA

Again I think that it has been possible to determine pretty accurately what broadcasting from London can and cannot do. It cannot compete with All India Radio in live performances of Indian music. It cannot compete in Indian drama in the vernacular languages. It cannot, also do very much in Indian language poetry in *mushtarras* and such-like symposia of wit and learning. But on the other side it can do quite a number of things to supplement what All India Radio is doing. It can bring to the microphone Western statesmen, scientists, poets, and critics whose names are justly revered in India. It can bring the most eminent living exponents of British art and letters in person to explain their work. It can stimulate the study of the English classics by the voices of great actors. It can not only give the finest interpretations of Western music, it can also interpret Western music in terms intelligible to the Indian listener. And it can reflect, through Indian eyes, for the benefit of Indians,

the proceedings of the Mother of Parliaments, as well as lesser manifestations of the unfolding life—political, social, academic—of Britain. Thus by bridging distance it can project the culture, past and present of Britain to India. Finally, it can suggest, for India's own judgment, solutions of problems which have confronted Britain and may confront India also. Broadcasts covering all these and certain other topics have been found acceptable to India, and there seems no doubt that when more normal times return the demand for British speakers of eminence in almost every field but particularly perhaps, in science, will be very great.

Such are some of the lines evolved by experience under war-time conditions which may perhaps point the way to a successful broadcasting service from Britain to India. Of the need of a reciprocal service from India to Britain I have already spoken. Upon the details of the existing programmes and services of the present allocation of time between the English and the Indian languages, upon a description of the multifarious machinery which each service requires I have deliberately not embarked. For in my opinion all these have been so moulded and shaped by war needs that their bearing upon the problem is transitory and subject to revision. For the same reason I have not attempted to evaluate the actual effect on India today of the several services broadcast from London which are audible in that country. The times are abnormal: men crave for war news; they are less inclined than usual to search out the good and the beautiful. Yet it is upon these latter things that broadcasting with its strange power of bringing the problems of humanity to the business and the bosom of the individual citizen, depends for and in the last resort will assuredly find its justification.

DISCUSSION ON THE FOREGOING PAPER

At a meeting of the Association at Caxton Hall S.W. 1 on Tuesday November 28 1944, Professor L. F. RUSHBROOK WILLIAMS C.B.E., J.P. gave an address on Broadcasting to India. Some Lessons of War Experience. Sir SAMUEL RUNGANADHAN, High Commissioner for India, presided.

The CHAIRMAN said no introduction of Professor Rushbrook Williams was necessary owing to his many public activities and the many distinguished posts he had held. He also rendered outstanding service to the Indian States as political adviser. He was the author of a large number of historical publications. More recently he had been Director of the Eastern Service of the B.B.C. and it was that experience which enabled him to speak with first hand knowledge on broadcasting relations between England and India—a subject of the very greatest importance for the future of the two countries.

After the reading of the paper

The CHAIRMAN said that the lecturer had been careful to point out that he had excluded from his survey some important aspects of Indian broadcasting, those, in fact, which were of particular interest to Indians, as, for example, broadcasting as an instrument of popular education in India, and as a means of instructing and enlightening the great masses of people with regard to all the vast problems of post-war reconstruction in India. The All India Radio was originally designed essentially as an internal service, and in view of the vast extent of the country and the needs of the general public the rapid development of the internal service was of the very greatest national importance for India.

Fortunately the authorities in India were fully alive to the need for this development of broadcasting and the reorganization of the radio service on a nation-wide scale had already been planned and was now under consideration by the Government. Owing to the impetus of the war there had been considerable progress in this

direction. The short wave stations at Delhi, Bombay, Calcutta and Madras provided internal service which had an all India coverage, and the number of licences issued had increased by about 300 per cent. in the past five years. It was also reported in the Press recently that over 40,000 radio sets had been imported into India from the United States of America under lend-lease.

Not only had the war given a great impetus to the development of internal radio, but also to the provision of broadcasting services to countries outside India's borders. The All India Radio's external services now covered the whole of Asia and beyond, broadcasts being given in twenty four languages, nine Indian and fifteen others. That was a development of which India was indeed very proud.

The lecturer had spoken of the notable service which the B B C had rendered and was still rendering to India, the Indian and Eastern services of the B B C had been appreciated both by Indian fighting forces and the civilian population of India. In this connection he would mention that in his recent visit to Indian troops in Italy he was very glad to find how much the B B C broadcasts were appreciated by them there. The All India Radio, in spite of its various handicaps, was now in a position to do something in return for the service which the B B C was rendering to India. The All India Radio had been able to send various types of recorded programmes to the B B C studio and transmission facilities were given to the B B C's news correspondent in India, and messages from British troops to their relatives in England were recorded and sent to the B B C.

All this was only a beginning in the reciprocity of which the lecturer spoke. The rapid technical developments taking place in the field of radio throughout the world were also taking place in India, and after the pressure of war needs had been removed the All India Radio would doubtless be able to send out to England suitable programmes on the kind of subjects to which the lecturer had referred. There was a vast variety of Indian subjects which would be of interest to British listeners.

The suggestion that there should be an exchange of personnel between the B B C and the All India Radio was interesting. It would be a good thing if the B B C and the All India Radio maintained a regular staff in each country whose main object would be to give people-to-people broadcasts. There should, in fact, be such an exchange with Canada, Australia and other members of the British Commonwealth and it would be a most effective way of using broadcasting as an instrument for promoting greater understanding, unity and goodwill among the peoples of these countries.

Mr. LAWSON REECH (Eastern Services Organizer, B B C) said that he had nothing to add to what the lecturer had said on the general problems, but there were two or three points which he would like to take up. The first was one which occurred to him when the Chairman made his broadcast to India after his visit to Italy and was thus able to report to his countrymen on the efforts and doings of the Indian contingents in the Central Mediterranean. Not only would news of the Indian contingents fighting in Europe be welcomed in India, but after the war there would be an increasing task for the medium of broadcasting in reporting back on the doings of those who came from India on more peaceful missions as students or to exercise their varying professions.

On the question of personnel, he would say that it was something very near to the hearts of all those concerned with broadcasting that there should be an exchange between the two countries. At this moment a senior member of the B B C Indian News Section was on his way to India where he would be attached to the All India Radio and a senior member of the All India Radio staff was on his way to London so that even under war-time conditions this exchange was being kept alive.

The speaker wished to pay a tribute to Mr. Z. A. Bokhari who after more than four and a half years of work in London was leaving shortly to take up new and responsible work in India. He would take with him the sincere good wishes and goodwill of all with whom he had been associated in the B B C.

The B B C was very grateful for the cordial co-operation which All India Radio had extended to the New Delhi office. It started in a small way two or three years ago and had built up quite an elaborate organization, catering as it did for the pro-

gramme side of broadcasting and also feeding the Home and Overseas Services with commentaries and background material not only from India itself but covering the whole of the S E A C front. This could not be done without the facilities and good will put unreservedly at the disposal of the B B C. by the All India Radio and the Government of India in all its branches and departments. It was sometimes felt that the B B C should not be in India in the form of a branch office but the important task of that office was to supply the B B C with programmes for the Home audience and ideas for programmes to send back and to develop relations with listeners in India. Throughout all that work the office had received the readiest co-operation of all official bodies with whom it had come into contact.

Mr HILTON BROWN said that he was glad that the paper had been written because it enabled its hearers to realize how much had been done and how well it had been done. He had not heard an actual broadcast to India but he sometimes saw the scripts which went out. There was one advantage which the broadcasts had and that was that in addressing the Indian intelligentsia the Eastern Services could always depend upon a certain fixed level of intelligence—and it was a high level. For a long time broadcasts to India must aim at the intelligentsia and that was an argument in support of Professor Rushbrook Williams's suggestion that broadcasts to India after the war should be in English.

He agreed heartily with the need for reciprocity. It was perhaps strange to suggest to such an audience that more broadcasts from India were needed. The reason was that listeners in this country were very ready to label as propaganda anything said by those who had official experience of India, or even by Indians living in this country.

He wished they might consider the kind of talks to be given. There was an enormous field from which to choose, the variety was endless but there was not time to go into it. He hoped, however, it would be done on a carefully considered plan by means of series with a theme and a beginning, a middle and an end. If masses of undigested India were hurled at the listeners in the country they would be in a worse state of fog than ever and would give up all attempt to understand.

He regretted that Professor Rushbrook Williams was no longer an officer of the B B C. He worked with him to a certain extent, always to his own advantage and benefit.

Mr J CHINNA DURAI said that he had given some broadcasts to India from London but when he was invited to do so for the first time the subject on which he was asked to speak was too high brow for the people of India. It was the subject of law in England, which the majority of the people of India could neither appreciate nor understand. Although the B B C had done much from the point of view of entertainment of Indian troops in the Mediterranean and Middle East, it seemed that there was some lack of vision as to talks which would be of interest and advantage to the Indian public. The kind of talk which would for the moment promote better understanding between the people of Britain and India would be topics relating to present-day happenings. For instance, he suggested to the B B C when Japan was knocking at India's frontiers that a talk on Japan should be broadcast. He prepared a script and understood that it went over very well.

In this country there were many Indians and also Englishmen who were in close contact with the British public and knew what was passing in the mind of the average Britisher, what he said about India, and what he thought and felt about India, and it would be most valuable if something of this could be made known to India to refute charges of suspicion and bad faith. It might be termed propaganda, as Mr Hilton Brown had hinted but if it would serve a useful purpose it ought to be put over, notwithstanding possible criticisms from some unthinking or unimaginative quarters as a matter of service to India in India's own interests. He would like to suggest that there should be a little more vision in the matter of selection of material to be broadcast to India in the limited time allocated for the purpose.

Lieut.-Colonel H R HARDINGE said his excuse for speaking on the most interesting address was more than forty years' experience in India, the later of them until 1938 being closely associated with the development of broadcasting in that country.

He heartily agreed, as surely all thinking people must do that international broadcasting was a power of the first magnitude in the direction of better understanding between peoples. Let there be, therefore, as much broadcasting, both to and from India as possible. As to the former, a programme committee composed of Indian and British members should know what India wanted—namely items of interest to the Indian intelligentsia and English-speaking peoples generally in English. They could afford to possess good short wave receivers and take these items either direct or via relays from Indian short wave stations at Delhi, Calcutta, Madras and Bombay. When he was last in India, he was able as a rule to receive the B B C Empire programme direct at Delhi or Simla quite clearly and satisfactorily.

As to broadcasting in India he submitted that All India Radio should edit, condense, simplify and put into the vernaculars such of these items as were likely to be of interest or helpful to the rural population to be broadcast from Delhi to provincial broadcasting centres and relayed thence on medium wave. Much had to be done by way of providing these rural areas with suitable means of reception. There was a very big field for initiative on the part of the radio trade in this respect. The value of international broadcasting must vary in proportion to the ability of the masses to benefit therefrom. That was why it was so vitally important that the standard of education in India should be raised with the least possible delay. He visualized Indian broadcasting playing a very great part in this direction.

Broadcasting from India to this and other countries surely was at least as important as to India, if indeed not more so. Ignorance of India outside its limits was colossal for the simple reason that the ordinary public hardly ever heard the country mentioned and was rarely told anything about it. Could not a little room be found in the B B C Home Service programmes for say occasional descriptive talks, preferably by Indian speakers, on the country its peoples their customs trials and tribulations and what not? These could be prepared beforehand if originating (as mostly they should) in India, while hot news items could be recorded when conditions were favourable and broadcast when convenient and if not technically satisfactory re-recorded for transmission by the B B C. If occasionally the B B C transmission in the Home Service included merely an edited telegram from India who cared so long as it came through and was what was wanted? Political news should be mere statements of fact without comment thereon. The average listener in this country was not interested in details of Indian party politics and India rightly resented anything savouring of political bias over the broadcasting to that country.

MIR BOKHARI said that Sir Frank Noyce the father of Indian broadcasting, was present, and India owed him a very great debt.

All India Radio possessed several medium and short wave stations, and no medium wave station would cover the whole of India the biggest medium wave station in India was at Delhi and the area which it covered was 80 miles. In order to cover the whole of India therefore, it was necessary to have a great many medium wave stations or to have a short wave service. If there were medium wave stations planted all over the country with broadcasts relayed from Delhi, for instance, linguistic difficulties would arise. Delhi could not pretend to cater for anything but the north and even from the north the speaker would exclude the Punjab.

It was obvious that if the B B C wished to establish itself (and it had established itself) it would have to stand on its own legs and compete with the whole of the world. But India was becoming radio-minded. As to the question of short wave stations, with the exception of a few thousand sets very few were medium wave sets because of the distances. There were medium wave sets in Calcutta because in the early days Calcutta was the first city to start broadcasting on a medium wave and there was no other service and the people were satisfied with it. He would stress that the B B C should do its best to invite listeners to listen to the voices of London direct and not to rely on having programmes relayed. They could relay the programme which was asked for and that was a question which All India Radio and the B B C would have to decide.

One station director could not dictate the needs of other stations each station director would have to make his own needs known to the B B C., and he suggested

that there would be so many requests from the various stations that the B B C would have to find special transmitters.

About the needs of Indian broadcasts to this country, speaking as a listener and not as a member of All India Radio or the B B C, a telegram was received in India before the war asking for a talk by a man who had to travel by bicycle to his work through the jungle. He had framed it and it was in his office. No doubt things had changed since then, although a famous newspaper (not British) had asked for an article from a representative Indian—for example an elephant driver.

Mr R W Brock wished to emphasize the enormous scope remaining in India for the extension of radio broadcasting as exemplified by the fact that in a country with a total population of 400 millions, including an urban population larger than the total population of Great Britain the number of listening sets did not at present exceed 250,000. If that figure reflected past neglect and tardiness in the development of broadcasting in India it was also a measure of the potentialities which lay ahead. One of the main lines of development was emphasized in the second report of the Reconstruction Committee of the Viceroy's Executive Council—the scope for the multiplication of radio receivers in the villages where they were essential for every purpose of social and economic progress. In that recommendation was indicated the foundation of what might well become in the post war period one of the most important new industries it would be possible to establish in India—namely an industry designed to secure the mass production of communal receiving sets which should be made available mainly by the aid of grants from public funds, to the whole of the country's 700,000 villages.

With regard to the immediate demand for radio receiving sets the Chairman had mentioned the recent importation of 40,000 sets but that figure underestimated very greatly the potential demand at the present time. If imported sets could be made available, he estimated that in the five years after the cessation of hostilities India could absorb anything from 250,000 to 500,000 sets representing an expansion greater than during the preceding twenty or twenty five years.

For the first time in her history—with sterling balances totalling £1,000,000,000 (one thousand millions) in addition to large funds available for investment in India—that country was in a position not only to plan large scale developments but also to finance them without external aid. Consequently he hoped that full consideration would be given in the reconstruction programmes to development plans affecting radio broadcasting, and meanwhile, even at this stage to the need which would arise as soon as the European war ceased for a large increase in the number of sets which India would be able to import from this country or the United States, or both.

Sir FRANK NOYCE said that Mr Bokhari had much too generously referred to him as the father of broadcasting in India. When he left India in 1937 it was only a puling infant, but as was evident from the lecture it had grown into a lusty youth of whom any father might be proud. It was only in 1935 that broadcasting in India became a separate department, before that it had been part of the Post and Telegraphs Department. The great difficulty in the way of expansion had been the usual one of lack of funds: the department had been regarded as something of a luxury, and it was not easy to get any money for it. The war, in that direction as in so many others had greatly stimulated progress and it was now going ahead very rapidly.

Great stress had been laid throughout the afternoon on the question of reciprocity. He thought it was true to say that never in English history had so much interest been taken in Indian affairs as was the case today. There was a constant demand in this country for lectures on Indian subjects, and the questions asked at the end of them showed a keen and intelligent interest in a vast subject. What was wanted was more information about India from India itself. People in this country wanted to hear what leading Indians, and not only leading Indians but especially members of the younger generation had to say about the economic, industrial agricultural and political problems which faced India in the future. Reciprocal broadcasts would have another great advantage for the majority of those present: they would enable them to hear once more the voices of old friends in India.

Professor RUSHBROOK WILLIAMS said that he was glad that his paper had produced such an interesting discussion, because there was hardly an aspect of Indian broadcasting which had not been mentioned. He would draw attention to one feature raised by Mr Brock and stressed by Sir Frank Noyce—the question of money for broadcasting. As Mr Brock had said, it was a definite recommendation of the Report of the Reconstruction Committee that broadcasting should be used to its fullest possible capacity as part of a general campaign for the education of the people. The rather depressing analysis given by Professor A. V. Hill as to the dependence of the whole of India's economy upon food, health and population would be remembered and broadcasting could play an enormous part in the education of the nation and in laying the foundations for the national effort which would have to be made.

It was interesting to notice that some well instructed Indian economists believed that during the first five year period for which the departments of the Government of India, the Provinces and States were now invited to put forward a blue print, there would be something like £2,000,000,000 sterling available. The Report itself was content to put that figure between £600,000,000 and £700,000,000 from official sources alone. Even if a fraction of that amount could be devoted to laying the foundations for a systematic campaign for popular broadcasting in India two things would be accomplished. The mobilization of the people of India towards reconstruction would be greatly accelerated and the importance of linking up India and Britain would for the first time be emphasized. It was correct as Mr Hilton Brown had said that in broadcasting from this country to India at the moment an audience of very high intellectual level could be reached, but it was equally true to assume that there were a great many people who would be interested in what was being said from this country if it could be put into sufficiently simple and clear language. That could only be done through an Indian broadcasting organization but at the moment such transmissions did not reach the mass of the people at all. The sheer lack of numbers of Indian listeners was the greatest handicap of all at present in trying to use broadcasting as a means of improving international relations. Anything which increased it, anything which enabled broadcasting to be brought to the small country towns would be an immense gain, and it was from that point of view that he was very glad to hear the real consensus of opinion expressed by the audience as to the part which broadcasting could and should play.

Sir ALFRED WATSON proposed a vote of thanks to the Lecturer and to the Chairman. He felt in listening to Professor Rushbrook Williams that one of the few virtues of war was the expansion of communications between peoples leading ultimately, one hoped to better understanding between them. It was a misfortune largely due to technical considerations that the reverse lend lease in broadcasting had been so inadequate. He would welcome broadcasts not only on the art and culture of India from Indians, but from leaders of the nationalists in order to convince if they could the people of this country on the merits of their programme.

THE BRITISH SOLDIER IN INDIA TODAY *

By LIEUTENANT-COLONEL G. R. STEVENS

SOME weeks ago Sir Frank Brown was good enough to ask me to address you on the subject of the welfare of British troops in India. My views on this subject were unpopular in some quarters in India, and they may prove unpopular with you here. But I can only say in extenuation that I am trying to offer a constructive approach to an even greater problem than the welfare of our fighting men, which is the future relationship of the British and Indian peoples.

Since Sir Frank Brown's invitation, Lord Munster has been in India investigating

* Lecture to the Association on December 13, 1944, with the Right Hon. L. Horé Belusha M.P., in the Chair.

this problem. In view of his visit and impending report, I propose to shift the emphasis somewhat. I shall approach my subject by the back door. I shall discuss the morale of British troops in India as a secondary manifestation of their relationship with the Indian peoples.

The normal European population of India was doubled in 1942 by the arrival of 60,000 Italian prisoners of war. I would suggest to you that this was an event of importance. Thereafter the 400,000,000 people and 700,000 villages which comprise Greater India had twice as many opportunities of seeing Europeans and of observing their habits and behaviour. But the important impact of the Italian prisoners of war lay in the fact that Indian peoples for the first time saw men in their midst with white skins who were not of a ruling caste. The Italian prisoners were men who worked with their hands and who demonstrated in their limited contacts with Indians that Europeans were not necessarily super Brahmins but men like themselves, men who were obliged to make their way, and to claim prestige not by virtue of race or birth but by inherent energy and ability.

I think it a great pity that more Italian prisoners of war were not taken to India and that they were not more widely distributed, that they were not allowed to establish their individual industries or to cultivate the land in their painstaking and efficient fashion. Had they done so they might have shown to at least a few of India's millions that the Western world was of one piece with the East, not inhabited by near-divinities born to authority, but by men who grapple in their daily round with the same problems which confront all who work in order that they may live. This, to my mind, is the most urgent fact to be demonstrated to the Indian peoples today if we are to realign our relationships with them. And consequent upon the acceptance of this idea, it will become necessary for Europeans resident in India to be no longer distinguished from their fellow-citizens by any advantage of race, or by any social perquisite, or by any implication of superiority. In no other way can such residents implement the solemn promise of the British Government that Indians are to cease being subject peoples and are hereafter to be arbiters of their own destinies. In no other way can we persuade the Indian peoples to associate themselves freely with that immensely great institution the British Commonwealth of Nations.

THE NEW RELATIONSHIP

I hope that you can accept this thesis, for I do not propose to invite or to refute any of the stock arguments which it usually evokes. I know that India is a continent and not a country. I know that the major races of India have little common interest or cohesiveness. I know that India as no other country in the world needs a guide and friend in the Western world. I am as certain as any *burra sahib* that the relinquishment of British control may mean twenty perhaps fifty years of internal strife and even of civil war. But I am also certain that time has marched on and has left us no alternative. We must either move in the van of events or else relinquish all our rights to leadership. And I am doubly certain that we can never achieve either leadership or friendship in India if we depend upon the crumbling façade of caste which has protected Englishmen in India in the past.

I have had the fortune to live at one time or another in all the great British Dominions. I spent my schooldays in British Columbia where my father himself an Englishman was loath to post on the walls of his factory the current Canadian phrase, No English need apply. My father maintained stoutly that Englishmen could dig as much ditch or chop down as many trees in a day as any native born Canadian. Later I spent many years in South Africa where the contempt visited upon me as a *verdamnte rooinek*—a red-necked Englishman—was only mitigated by the natural kindness of the Afrikaner. I have also lived in Australia, among people two generations from the sound of Bow Bells yet who reckoned the *pommy*—the English immigrant—to be only slightly higher in the social scale and only slightly less obnoxious than that other English importation the jackrabbit. Let us be frank. There was a time, and within the memory of many of us when in every British Dominion many an Englishman, like George Nathaniel Curzon, was a most superior purzon—and was cordially disliked on that account.

The crowning feat of British statesmanship—in which Britain has succeeded in a unique degree—has been the successful evolution of the British Dominions from subject states into allies—allies which owe no tribute to anyone who are free and independent and yet who twice within a generation have poured out every resource of blood and treasure in the service of the Mother Country. Today, epithets like *pommy* and *verdamte rooinek* are all but forgotten and I doubt if there is an industry in Canada that does not welcome Englishmen. There is only one basic reason for this change of attitude in the Dominions. Political brotherhood has replaced suzerainty, and in his contacts with overseas British peoples the Englishman no longer feels—nor shows—his former attitude of superiority.

I know all the stock arguments on this subject also—the Dominions are largely of British race, their populations are homogeneous, their standards of living approach those of Great Britain and so on. All very different from India. Again I plead that, whatever the truth of such statements, the march of events has forced our hand. We must either make India our willing associate or else get out. And the only way to make India a willing associate to the enormous advantage of Indians and Britons alike is to persuade 400,000,000 people of different race, habits and character from ourselves, that we are prepared to relinquish our status as superior beings and are willing to become partners and associates in the business of living in India.

THE BRITISH SOLDIER'S INFLUENCE

So, coming back to our Indians if we regard their presence in India as beneficial in that they show the Indian peoples that *sahibry* and a white skin are not necessarily concomitant, how much more beneficial might be the presence in India of ten times as many Englishmen in the form of the British Army of today? Indeed within the next year or two the European population of India will be twenty perhaps thirty times greater than before the war. Millions of Indians who have never seen a European will observe the habits of life of British soldiers and I believe that it is possible to use these hundreds of thousands of Englishmen, who as part of a conscript army represent an accurate cross-section of British thought, habits and character, as our ambassadors of goodwill, to dispel old notions and to create a new concept of what Great Britain in the 1940s really is and really stands for. At this time at the eleventh hour and the fifty ninth minute through the medium of the ordinary workaday Englishman serving his country in the Far East I believe it still possible to win the confidence and affection of Indians—a confidence and affection which have diminished to a marked degree in the last thirty years.

In a paper as short as this I must omit much that I would like to say about the men who represent British authority in India today but I want you to believe that I recognize the enormous services which they have conferred upon India and the equally obvious fact that their replacement by Indians is not going to solve India's problems overnight. But, from my experiences as a staff officer in New Delhi I am satisfied that the five hundred odd British I.C.S. and the *x* hundred senior officers of the India Command cannot persuade politically conscious Indians either to trust us or to co-operate with us. With very few exceptions these *burra sahibs* are immured behind the walls of the old ruling traditions and they cannot present the picture of the Britain of today to Indian minds.

All of you know of the hypersensitiveness which characterizes so many educated Indians. That touchiness arises, in part at least from an inferiority complex. The eradication of that inferiority complex is one of the biggest jobs in the world today. It may be the only road to salvation in India, that single factor which, after the abandonment of British control will save India from perhaps a century of chaos. With the best will in the world, senior officers and civil servants can do little to help in this task. It would involve a complete about face in their attitude towards the people whom they govern or command. That would be I think, too much to hope for or to expect. But I am rash enough to believe that the ordinary British soldier can do the job where his superiors might fail. The need is so great that I think he should be given the chance.

The evidence upon which I base this opinion comes from personal experiences. My first service was in Middle East, where I saw British and Indian troops in garrison

and on operations in Egypt, Libya, Palestine, Syria, Cyprus, Iraq and Iran. In each of these countries (with the possible exception of Palestine) I saw British and Indian soldiers building a permanent structure of goodwill for Great Britain—a structure which diplomats, traders and financiers had failed to build in the past. How did they do it? Well, in the first place, they represented something comprehensible. They were working men going about their jobs, and their jobs made them intelligible to other working men in the countries in which they were in occupation. They were not god-like creatures like diplomats and financiers for almost anybody could understand what they were about. In the second place, their standard of intelligence was astonishingly high—higher in some ways I think than that of diplomats and financiers. I would say that in the British conscript forces of today one man in every eight—that is, one man in every section, one man in every bell tent—is sufficiently well educated to exercise a dynamic influence upon his comrades to cause the other seven to think above what would have been their level if the eighth man had not been with them. Consequently the British forces today represent that tolerant, practical and fair-minded Britain which has so much to offer to the world. The Britain which led George Santayana to say in his memorable phrase, "Never since the days of the Greeks has the world known such a wise, just and boyish schoolmaster."

AWAKENING INTEREST

When British troops go abroad they instinctively dislike their surroundings. They thereupon proceed to cure—or to ameliorate—their healthy insular dissatisfaction by making the corner of the earth where they are stationed a little bit of England. Cricket and football pitches go down, the wine-shops and cafés are taught pub-manners, the tea habit is established. There the process used to stop. But during this war the higher standard of intelligence of the Forces has led to a further development. The advantages of interesting British troops in the countries in which they are serving has been recognized by many military commanders. Diverse interests make for efficiency by keeping men keen and active. Local contacts, once frowned upon, have proved a considerable morale factor, and in Middle East troops were encouraged to learn as much as possible about the countries in which they were stationed when ever military duties permitted they were allowed to identify themselves with local enterprises which served to introduce them to the civilian populations.

The effect of such contacts on British soldiers in many areas was most marked and most beneficial. But it was as nothing to the effect upon the local inhabitants. For numberless generations these peoples of the Levantine countries have seen soldiers coming and going. The armed man hitherto, for four thousand years has arrived as the intruder, the power from without which destroyed security and happiness. But the British soldier in this war was different from any who came before him. He did not use the civilian population as his property, nor did he give orders nor did he steal or kill. Instead he came rather as a guest who was interested in his hosts as a guest who was prepared, if given a chance, to help in the housework. As a result, everywhere in the three thousand miles between Tunis and Teheran the local inhabitants are friends of Great Britain today because of what they know of the habits and behaviour of British troops.

If time permitted I could give you dozens of instances of friendships established by British soldiers which will continue to serve their country long after they come home. I will mention only two. The colony of Cyprus before this war was a bit of a headache to the Government of Great Britain. It is only a few years since a mob burned Government House in Nicosia. A separatist movement was backed by the principal landlord of the island, the Greek Orthodox Church. There was not an English language newspaper in Cyprus, there was not a British industry nor a British merchant trader in the island. At best the Cypriots were sulky subjects. Today this has been changed. The change has been wrought, not by a change in officials or in policies but by men of the British Forces. Unit commanders seeking to buttress morale in a garrison station, encouraged their men to be interested in Cyprus, its history, its people, its customs. Today the Cypriots, having become acquainted with the British people in arms instead of with a handful of civil servants, are for the first time in their history proud of their association with Great Britain.

A number of Indian mule transport companies, after serving for four years in Great Britain, returned home this year. They were met at Bombay by that great man Brigadier Brayne, whose work in village reconstruction in the Punjab may be familiar to some of you. I am going to quote from his report upon these Indian soldiers, who had learned something of Great Britain and of our ways of life here.

From having walked in the English mud, wrote Brigadier Brayne, they had picked up the English slouch and stride. They smoked pipes and quite a number said that they were going to stick to them. Some said that they only wanted a little leave and thereafter to return to England. One said that the people spoke the truth in England. Another said that a lamb born at six o'clock in England could not be caught by a dozen men at four o'clock. His friend agreed and spoke of sheep-dogs. A sheep-dog was worth a platoon. It fetched the sheep named by the shepherd. A long handled English hoe, said another, was a better implement than a *kharpa*. They all approved of latrines and were quite shocked when I told them that the Punjab hated latrines. They said they found no party faction nor litigation in England. They wanted to know why Indian roofs were still flat, so that thieves could move about them at their pleasure. They said that chimneys, and flowers in the courtyard and cooking on a grate—each of these things was right and proper. Indeed all the things for which I have been laughed and sneered at by British and Indians for the last twenty years seemed to these men to be merely common sense.

THE VALUE OF FRIENDLY GESTURES

Now I put it to you, if only a small proportion of the hundreds of thousands of British troops who must train, garrison, convalesce and spend their leave in India were to show the same intimate appreciation of Indian values which these transport drivers showed of English habits and environment we would be on our way to establishing permanent friendships in India such as I believe we have established in the Middle East. The British soldier, by discovering interests in the Indian scene would benefit in morale for boredom during the years of training and garrison duties is a most dangerous enemy of military efficiency. But any benefit to the British soldier, marked though it may be, would be as nothing in comparison with its effect upon Indians, who I believe would not fail to react favourably to any appreciation of their country, their manners and their way of living. And, above everything else such contacts would be a reassociation of East and West on a new basis—a move away from social isolation, and towards fellowship.

I will give you one instance of what a friendly gesture can accomplish in India. I am fond of ballet, and I found the Westernized Indian ballet, as sponsored by great exponents like Uday Shankar and Bhagat Ram, to be exciting and absorbing. I wrote one or two articles on the birth of this new ballet and the part that India might play in the future of this form of entertainment. These articles led me to acquaintanceship with a certain number of professional entertainers—actors, novelists, painters, story tellers, radio stars, poets (India has more than her quota of poets)—and similar artists. I found them to be made of much the same stuff as their Western opposite numbers. They taught me something of the entertainment business and of the arts in modern India. I discovered that organized entertainment offered excellent vehicles for my propaganda. I appealed to these friends I had made—these technicians of the film, radio theatre and advertising professions—and I found them very ready to assist me. They contended that we had been doing many things in the wrong fashion. I instituted audience reaction tests to confirm their recommendations and found them to be right in every instance. So, having discovered the right way to put our case, I went back to my friends in the entertainment industries and asked further assistance. This likewise was willingly granted. Before leaving India we had made a start in morale-building enterprises and in selling the war to the Indians, not through suspect official agencies, but through the normal channels of entertainment. All this arose out of my expression of appreciation of the Indian ballet. I am certain that in the thousand other activities which comprise the mosaic of Indian life a similar interest would engender a similar response.

If the proposal to introduce Britons to Indians has any merit, and if the association is to be fruitful, I feel that we must face the fact at the beginning that such enterprise

will not prosper under the auspices either of the Government of India or the India High Command. The Imperial gulfs between ruler and ruled have not been bridged and cannot be bridged by a generation of officials and commanders whose roots are in a system that is rapidly passing away. With the best will in the world—and I do not question either the willingness of the Europeans in India to make concessions—they cannot administer an enterprise based on what is to them new and revolutionary psychology. They are not *en rapport* with the Indian intelligentsia, and I fear that in some cases at least they are even more out of touch with current British thought. To do them justice, these harassed and hard working officials who carry the burden of administration in India have had little home leave in the last ten years and they do not realize that the British conscript army of today is perhaps as representative of British opinion as the House of Commons or any other British institution. There is nothing of Soldiers Three left in the British Army except in the pages of Kipling and sometimes I wonder if some of those in high authority in India realize this.

DISCONTENT OF SERVING MEN

To both the Government of India and the India High Command the presence of hundreds of thousands of British soldiers in India raises problems which make their presence there in the eyes of administration officers at least, a cause for worry rather than for congratulation. Take for instance, the matter of morale. Many British soldiers have been in the Eastern theatre for from five to seven years. Military necessities have prevented a regular repatriation programme. The presence of large bodies of Allied troops in England, and exaggerated reports of marital infidelity have added to the unrest. British soldiers in India are even denied their favourite Aunt Sally at which to shy their grouses for N A A F I is not allowed to operate there. Instead, almost the only people whom they see riding in luxurious motor-cars are the army contractors. To all too many soldiers therefore India and its people represent only squalor servility and abysmal ignorance. They hate India because in Mr Nehru's sad phrase they have never looked upon India's face.

When I first went to Delhi I felt that something might be done. I had seen British and Indian soldiers under the stress of the desert campaign come to a fine pride in each other and to a heart raising fellowship. I was not prepared to accept the oft repeated dictum that British troops had always disliked India and always would. For it was not true. Every week in New Delhi excerpts from censored letters forwarded for my information gave instances of British soldiers, prompted by intelligent officers who were discovering India to be a land of absorbing interest. One regimental commander had organized a sort of Brains Trust in which British and Indians sat in a circle and questioned each other on every subject under the sun. Another British unit had adopted a nearby village had organized welfare work entertainment and sports. Another C.O. asked me for lecturers who would as he said put his men in the Indian picture. A fourth unit tried to arrange its leave rosters on an occupational basis so that men who had been steel workers in Civity Street might have a chance to see the great Tata mills, farmer-soldiers might visit Indian experimental farms, and so on.

INHIBITIONS

But these intelligent unit commanders were mere voices crying in the wilderness. When through the media of our publications our radio programmes, our films and our posters we attempted to awaken a deeper interest in India among British soldiers I encountered continuous difficulties. I report the following instances not as complaints nor as criticisms of my superiors whose hands I know in many instances to have been tied by long-standing instructions, but simply to show how hard it is to put new wine in old bottles. When I planned a series of articles for our publications by Indian authorities who would write on their own subjects I was forbidden to commission such articles on the ground that no Indian would write for any official publication without dragging in politics. When I tried to place another of our publications, an ably edited discursive weekly of the *Spectator* type, on general sale in order that educated Indians might know what the British Army read and thought I was forbidden to allow civilians to see it lest the soldiers' letters—we were proud of

our correspondence columns, for they were up to the best British standards—should be twisted into criticism and used to embarrass the Indian Government. When I wanted Indian lecturers I was offered Rs 50 a month—£3 10s—over and above their subsistence. At every turn I found almost insuperable difficulties in fostering contacts between the British civilian army and politically conscious Indians and in encouraging them to be frank and friendly with each other. Indeed I was finally told that this was not my job. My superior was probably right. Yet I came away even more convinced than before that I was on the right track, that a great opportunity existed, and that to establish fellowship between representative Britons and Indians on a basis of equality was one of the most crying needs indeed one of the greatest tasks, of our time.

WHY NOT FRATERNIZATION?

If you calculate the intelligentsia of India at one-tenth of one per cent of her population, you will find yourself with a half million Indians who comprise the leaders of the commercial and industrial communities, the technicians of India's industries, the teachers and the professional classes. These men and women are the vanguard of westernization in India. They make their livings by keeping abreast of Western methods, technique and modes of thought. Their faces are turned towards the West—that is to say, towards Great Britain which has always been the gateway to the New World for Indians. As a class, this intelligentsia fear and loathe the Japanese. Pan Asia can never be other than a menace to them. Individually the relationships of these Indians with Europeans are pleasant or no worse than in different. In their general outlook they can be said to be pro-British but anti Government of India. They are particularly resentful that after twenty years of haggling the old forms of suzerainty and of social differentiation still prevail. Their attitude towards their own political parties is cool and in many instances is tinged with despair. On the whole I would say they were disillusioned with politicians British and Indian alike. They long to see India emerge to greatness. To them her road to destiny seems unreasonably long.

There is nothing in the foregoing attitudes to keep British soldiers and educated Indians apart. A great many soldiers in India are sympathetic to Indian aspirations. The Indian wants a new India—the British soldier wants a better Britain. There is consequently common ground for friendships, which if formed might profoundly affect the future. The opportunity exists and time marches on.

I hope I have made it clear that I believe that a far greater association of British and Indian peoples is possible than has been achieved in the past, that such development might affect the futures of both countries, that the activating agent in establishing such friendships cannot be the European residents of India who adhere to traditional attitudes, but the British civilian armies whom I believe to represent and interpret more correctly the current thought of Britain.

As to method I have ideas of my own as how to proceed but I realize that they are the ideas of one who spent a very short time in India and consequently have no value except as personal opinions. I would like however in closing to express my deep personal satisfaction with the recent appointment of Brigadier Desmond Young as Director of Public Relations, Indian Army. If he is given a directive to popularize India with British troops and to foster liaison between the Indian intelligentsia and our soldiers there is no man anywhere better qualified to carry out such a programme and to launch what might turn out to be a great Imperial enterprise.

N B—A lively and critical discussion on this paper followed and will be printed in the April issue of *THE ASIATIC REVIEW*.

(End of the Proceedings of the East India Association)

POST-WAR ECONOMIC RECONSTRUCTION IN INDIA OFFICIAL PLANS

By R W Brock

IN India while political planning tarries, economic planning is proceeding smoothly and swiftly and is finding expression in detailed programmes which—always provided they are carried into operation with the necessary vigour and co-operation—should yield very solid benefits and make possible the attainment of a reasonably high level of prosperity. It is not only conceivable, but probable, that, as and when conditions become propitious Government will make their own direct contribution to the evolution of a new form of government in view of the apparent inability of the party leaders to achieve that objective without official assistance. Meanwhile however, the reconstruction planning which Sir Ardeshr Dalal has joined the Government of India as Planning and Development Member to promote has one aspect which it may be timely to stress. In recent years India's form of government has moved forward more rapidly than her economic system, resulting in a certain degree of maladjustment. The system of Parliamentary democracy established under the India Act of 1935 was superimposed on an economy still largely medieval. Consequently at this juncture a period of economic planning and development, pending a further advance in the Constitutional sphere, may not lack advantages and should certainly give Indian Parliaments and Cabinets wider scope when unqualified autonomy is finally achieved. Unfortunately at all stages since the Montford Reforms, empty Exchequers—and the consequent inability to effect more than minor extensions of the social services—have represented the heaviest single handicap confronting Indian Ministers, and Provincial autonomy has proved relatively infructuous and disheartening predominantly on that account. That handicap it is now possible to predict, will not survive into the post war years. During the present century a succession of Commissions and Committees have formulated developmental projects, covering every sector in which progress was realized to be desirable but in most instances with little or no effect owing to lack of funds. Now however, for the first time, we have planning without impecuniosity and in the implementation of these schemes the Government of India, the Provincial and State Governments will all take part.

It is true that the large new financial resources now available are at present at the exclusive disposal of the Government of India, but it is equally true that this power of allocation will be a most potent factor in promoting not only progress but co-ordination nor is there any reason to assume that the co-operation so prompted will be in any sense reluctant. On the contrary as the Reconstruction Committee of the Government of India assert in their Second Report, now available. There is general agreement as to the measures over a great part of the field and for a task of this nature and magnitude a pooling of all resources will clearly be desirable, if not necessary and this will inevitably entail a considerable degree of co-ordination. Co-ordination is especially necessary in respect of such subjects as resettlement, industrial development, electric power irrigation road transport and road planning. In certain matters requiring unified direction it may be possible to set up autonomous authorities with powers of an all India nature in agreement with Provinces and States. In certain cases it may be desirable to set up regional authorities which extend over the territory of neighbouring Provinces and States, somewhat on the lines of the Tennessee Valley Authority in the U.S.A. (one of whose leading experts is now in India to investigate and make recommendations).

Inevitably, the first target of economic planning in India must be increased production, agricultural and industrial, accompanied by improved transport and communications. The social services demanded equally by the people and their political leaders can materialize only when individual and collective incomes have expanded sufficiently to make such schemes financially practicable. Universal education, a very

much higher standard of health and similar desiderata are unavoidably deferred until there emerges the very much larger margin for taxation which an all-round and substantial increase in production can alone make possible. In rural India usury remains the most formidable single hindrance to social progress. In the villages, where most of the population live, communal amenities financed from local rates will emerge only when usury disappears. In these small communities, of which there are 700,000, there is room for a rate collector (symbolizing the public interest) or for a moneylender (symbolizing private interest), but not for both! Indeed so long as usury—now utilizing more capital than industry and Government securities combined—maintains its present traditional and evil dominance the modernization of agriculture and industry alike may remain a popular aspiration but will never emerge as a solid achievement. British loans which at least financed productive undertakings and enterprises have been eliminated but the usurious loans of the rural moneylenders which are mainly unproductive survive, and will continue to cripple rural, and ultimately industrial, development at their source so long as they do so. What incentive has any cultivator to increase his output, by any means so long as the usurer remains the principal beneficiary, as he is in nine cases out of ten today?

India is entitled and should be encouraged and assisted to attain all the industrial development of which it is capable but in terms of employment what will such maximum development yield? The Reconstruction Committee, after noting that India's population now numbering 400 millions is increasing at the rate of 11 to 15 per cent. a decade, assume that this rate will remain operative for two or three decades. Meanwhile, The population at present employed in organized industry is officially computed as 2.16 millions in 1941 as compared with 1.75 millions in 1938 or an increase of nearly 25 per cent in three years. The increase in 1944 as compared with 1938 would be of the order of 50 per cent. In other words the number of workers in organized industry as distinct from village industries and small concerns employing unskilled labour falls below *one year's* increases in the country's total population. The Committee accept the inevitable inference that, while no definite estimate can be given of the possible expansion of industry and other forms of non-agricultural employment resulting from post war development, it would appear very doubtful if it can absorb the whole of the probable increase and, as emigration is likely to be more restricted in the future it will be clear that the pressure on the land is likely to continue. Hence the necessity for such a comprehensive programme as that formulated by the Imperial Agricultural Research Committee involving a capital outlay of £750 millions to stimulate every form of agricultural improvement and the Reconstruction Committee's supplementary recommendation that a land development organization should be set up in each Province to promote measures not undertaken by existing Services. It is lamentable that millions of acres have already been rendered unproductive by erosion and that much land is going out of cultivation or profitable use every year. The incidence of the Bengal famine, in which the casualties exceeded those sustained by all the forces of the Empire in every theatre of war supplies poignant justification for the Reconstruction Committee's insistent claim that the measures of land development proposed are required not only to decrease the pressure on the land and raise the standard of living of the agricultural population but also to ensure the food supply of the non agricultural population.

If larger agricultural outputs are essential to sustain the constantly expanding rural population to feed India's 50 million urban population to supply the raw materials needed by Indian manufacturers and leave a margin for essential exports they are also necessary to provide the increased purchasing power without which all schemes for expanding industrial production would be wholly futile. In the inter war period, Indian industries, aided by high protective and revenue tariffs expanded mainly by displacing imports. Henceforth they can expand only by the coming into operation of capital development projects which must, certainly for some years to come, raise imports to new high levels, with the United Kingdom and the United States ranking, in that order, as the principal sources of supply. How will these projects be financed? There is some natural perturbation in this country concerning our ability to discharge our immense and growing debt to India and in certain quarters in India an equally unjustified doubt about our determination to do so, possibly inspired by recollections

of our default on our debt to the U.S.A. after the last war but also reinforced by newspaper suggestions that the present amount of debt, originating in a hasty and ill-devised agreement, constitutes an inequitable obligation which should be pared down by every possible device. There is no reason to assume that the latter suggestions reflect official policy. On the other hand as between the American and Indian debts, it is legitimate to stress at least one fundamental difference—viz. that whereas the U.S.A. was unready to accept payment in goods—ultimately the only practicable method of discharge—India is not only ready but anxious to accept payment in this form and is concerned only to secure the goods she requires within the shortest period possible, making due allowance for the trading and financial difficulties with which post-war Britain will be confronted. The assumption in the Bombay Plan, and in the report of the Reconstruction Committee, is that India's sterling resources will, in fact, be available for utilization in this form excluding only the substantial amounts it will be necessary for India to retain in London as part of her currency reserves. Capital goods will be India's principal immediate requirement but in the long run it is not open to doubt that British industries exporting consumer goods will also benefit by the increased prosperity in India the utilization of such capital goods will tend to promote.

The vague assumption that, on balance British or indeed any other overseas industries interested in the Indian market will be disadvantaged by the development programmes now being evolved in India finds no warrant in the Reconstruction Committee's report. Rehabilitation of existing industries and services will be the first task and indications of the heavy supplies needed for these purposes will undoubtedly be forthcoming from the group of leading Indian industrialists who will visit this country early in 1945. A great deal of worn-out plant will require replacement and additional machinery will be required for installation in many long deferred extensions of existing factories. The Railway Board plan to spend over £200 millions in the first seven years after the war, largely in providing for rehabilitation and replacement of rolling stock but also to cover the cost of a yearly addition of 500 miles of new lines for a period of ten years. Local manufacture of locomotives has been provided for, but will necessarily take some years to mature. The extension of civil aviation will also necessitate heavy imports of aircraft and ancillary equipment. For the initial post-war period plans have been prepared for a system of trunk air services in India which are considered necessary for the proper development of India as a whole—socially, commercially and industrially. The services planned involve a route mileage of 10,500 and with a frequency of at least one return service daily will involve flying approximately 7.5 million miles a year. The services will carry mails, freight and passengers. Stimulated by the existence of these services there will undoubtedly emerge as a result of local or private initiative a considerable number of feeder air services to meet local needs. The Postal and Telegraph Department have drawn up plans for wide extensions of the postal, telegraph and telephone systems. Other plans contemplate the construction of new harbours and a considerable extension of inland transport. It is considered that the development of the Royal Indian Navy necessarily implies the concurrent development of the merchant navy leading up to the "acquisition of an adequate share in the world's carrying trade. The road programme includes construction of some hundreds of thousands of miles of new roads, and it is laid down that motor transport should be extended to get it into the heart of the countryside and that motor transport should also be used to a greater extent than hitherto by the Governments of India for administrative and development purposes. The manufacture as well as the assembly of motor vehicles in India is ultimately probable, but meanwhile large imports will be required to overtake the arrears of demand accumulated in a country of expanding incomes during the long war period.

In order of urgency it has been decided that power, which is the basis of all industrial development, should have priority over others. Furthermore, The policy of Government is to secure the development of electric power on a regional basis, to promote the maximum economic development and utilization of such power and to eradicate such factors in the present system as retard the healthy growth of such development. This policy may involve the development of electricity supply in

India as a State or quasi-State enterprise. In furtherance of this policy Government have secured allotment of manufacturing capacity for additional heavy power equipment for several key electricity undertakings in the country. They have also decided to set up a Central Technical Power Board for the whole of India.

Although the rationalization of the Indian coal industry is being taken up, it is on the development of hydro-electric power that India relies as her main future source of power and as her potential is the second largest in the world and only about one twentieth has so far been developed the scope of the plans now being worked out can be assessed. Furthermore the resumption of leadership in this field by the Central Government is of good augury. Their general outlook and programme may be inferred from the statement that the functions of the new Central Technical Power Board will be (a) to initiate co-ordinate and put forward schemes for electric power development throughout the country in consultation with Provincial and State Governments (b) to set up a well-equipped standardizing testing and research organization for electricity supply and problems connected therewith and (c) to undertake education and propaganda to encourage the accelerated development and utilization of electricity. Finally "Government have also accepted the policy of furthering the industrial use of electricity in the country—e.g. by the manufacture of fertilizers etc. In order to implement the policy of large-scale development throughout India schemes for the training of electrical engineers abroad will be pursued. The scheme will provide not only for training in the commercial and administrative sides of electricity undertakings but also for further advanced training of selected men in technical subjects.

Incidentally a point meriting detailed analysis is the extent to which the capital cost of the many new electric power projects now contemplated will include import duties although the plant imported is outside the range of Indian manufacture. I am prompted to make that comment by the official intimation that "Protective duties are imposed in pursuance of the accepted policy of protection. The principles and working of this policy must form the subject of a detailed investigation. Such an investigation might profitably embrace the extent to which high revenue duties—less essential now than hitherto—hamper Indian industries and even Provincial and State Government projects in respect of imported equipment still outside the range or programme of local manufacture. A relevant consideration here is adduced by the Reconstruction Committee when they say "If industrialisation is to be one of the major aims of economic policy a steep and even spectacular increase in India's import trade would be inevitable in the post war era. As they also remark "One of the weaknesses of the fiscal system has been the extent to which Central revenues have been dependent on Customs duties. The present trend towards the enlargement of the scope of direct taxation and excise duties is a wholesome development which should be further encouraged in the post-war period.

As expounded by its authorized spokesmen British policy in relation to India may be summarized as "political reconciliation and industrial co-operation. The first of these two complementary objectives remains to be achieved. But it may be anticipated with some confidence, that the second will be furthered by the decision, noted by the Reconstruction Committee that, "In order to promote Indian industrial development and also to provide first hand up-to-date information of what is happening in other countries it is proposed to arrange visits by leading Indian industrialists to Great Britain and if possible to U.S.A. and to give them all facilities possible under present circumstances to make contacts, exchange ideas and discuss mutual arrangements for implementing post war plans. Arrangements are under way for the first group of certain well known industrialists to leave as soon as they are ready.

Over a decade ago I had the opportunity to propose and make the preliminary arrangements for the series of discussions between the Lancashire and Indian cotton mill industries which culminated finally in what became known as the Mody-Clare-Lees Agreement. Although no two industries had been, or could have been in more direct or prolonged opposition, it is noteworthy that such an agreement proved possible and while it lasted was of mutual advantage. There is no reason to doubt that, in the very much wider consultations now pending, agreements will also be reached and will also prove of mutual benefit, not only to the industries directly

concerned, but also to the people of the two countries so long associated, and whose destinies, despite all differences and misunderstandings remain inextricably inter twined, politically and economically, and also for purposes of defence, now and for an indefinite period to come.

FAMINE PREVENTION WORKS IN BENGAL

By D N SEN-GUPTA

It is welcome news that the Government of India has set up a commission to consider the possibility of improving the diet of the people and the quality of the food crops

The province does not produce sufficient food for her requirements, and even in normal times a supply of food from outside sources is essential to make up for the deficiency. Sir John Russell, who studied the subject of production of crops in India a few years ago was of the opinion that the crop produced in Bengal was insufficient except in years of plenty. The position has not changed since his survey and as years of plenty do not occur normally more than once in four the yield during the remaining three years falls short of the requirements of the people.

The yield during the year 1942-43 was poor though not far below the average crop for a poor year. The production in the other provinces of the country was also not good. If the foreign markets had not been closed for the purchase of rice the situation could have been met by imports from Burma and other neighbouring countries.

The land in the province is mainly deltaic in character, and the major portion of it is below the flood level of the rivers. The stretch of country near the sea is below the tidal level. Near the western and eastern borders of the province the land is higher and more or less hilly.

The rainfall is about 60 inches per annum in the west and it gradually increases to about 120 inches in the east. The major part of it precipitates between the months of June and October.

The soil, the tropical climate and the heavy rainfall make the country suitable for the cultivation of rice. Rice is therefore, the principal crop and the staple food of the inhabitants and irrigation and drainage works suitable for its cultivation should be carried out.

There are three varieties of rice grown in the province. They are Aman, Aus, and Boro. Of these the first is the most important in quality and yield. Cultivation of the other two varieties is limited to areas which are either too high or too low for the production of the best variety. The Aus rice is cultivated in early summer, when the land is more or less dry. Boro is the winter rice, and it is grown in the lowlands where water for irrigation is available for bringing the crop to maturity. Wherever possible the land should be made suitable for Aman rice so as to ensure a better return. The Aman crop is sown during June and July and harvested in the following December and January. To bring it to maturity the crop requires about 42 inches of water distributed as given in the following table.

DEPTH OF WATER IN INCHES

	1st to 10th	11th to 20th	21st to end of month	Total
May	—	—	2	2
June	2½	2½	2½	7½
July	4	4	4½	12½
August	4	2	2	8
September	3½	2½	1½	7½
October	1½	1½	1½	4½
				42

Near the western edge of the province the country is hilly. It was previously covered by large tracts of dense forest, but, owing to the increase in population and

the demand for fuel and timber, the forests have been largely denuded. This deforestation has changed the climatic conditions. The thunderstorms of April and May, which are necessary for preparing the fields for cultivation, are not as frequent as at one time. The October rainfall, which brings the rice crop to maturity, has also become defective. Although the total rainfall is sufficient during the period when the rice plants are growing, its distribution is not suitable to the crop. Previously, when the dense forests were in existence, a large proportion of the rainfall used to be absorbed by the dry leaves and roots of the trees. The springs in the locality had a better supply from this source, and the ricefields could get water from them when the rainfall was in deficit. But now, owing to the denudation of the forests, the run-off is very rapid; the springs dry up quickly and the damage to the crop due to the lack of water is more frequent. This quick run-off has also affected the fertility of the soil by removing from the surface a large portion of the finer particles which bind the soil, retain the moisture and provide the soluble plant food. Moreover, the manuring humus washed down from the forests is now limited. The yield from these fields has thus deteriorated considerably and is about 7 cwt. of paddy (unhusked rice) per acre, whereas with a good supply of water and proper manuring the production could be threefold. An adequate replanting of these forests is therefore necessary to increase both the agricultural and the forest produce.

In 1939 a committee was appointed, with Mr H P V Townend, I.C.S., as chairman, to enquire into the matter of deforestation. It recommended afforestation, and suggested that the owners of existing forests should be compelled by legislation to manage their property in such a way as to prevent serious deterioration, and in cases of mismanagement the Government should take over direct control. The recommendations were framed after consideration of forest laws operating beneficially in other countries, and they should be brought into effect as early as possible.

The proposed afforestation will regulate the flow of the streams in the locality of the forests and high floods in the rivers fed by them will be moderated, while the flow in them during the dry periods will increase. This effect will be all the more perceptible if similar afforestation and protection of the existing forests is carried out also in the neighbouring districts of the province of Bihar. The more important of the rivers to be benefited thereby are the More, the Ajai, the Damodar, the Selye, the Darakeswar, the Cossye and the Kalighye.

The country is dry and needs plenty of water for the cultivation of rice. The seepage from the forests even after the suggested afforestation will not be sufficient to meet the requirements of irrigation. The country is hilly and there are many sites where simple earthen dams thrown across depressions will conserve sufficient rain water to meet the shortage. These earthworks with a little financial help and guidance from the Government, can be constructed by the cultivators concerned during the period when they have no employment. Between the hilly tracts and the river Bhagurathi Hooghly the country is flatter and about 70 per cent. of the land is arable. But the soil is not fertile and the poor cultivators cannot afford to use any manure except small quantities of cowdung. The rainfall is also defective, and except in small areas there is no arrangement for artificial irrigation. The unirrigated fields produce only half a ton of paddy per acre, when it should be possible to double the yield if the fields were properly irrigated and manured.

The rivers in this region are torrential. They are fed by the streams from the hilly tracts of this province near its western border and from the neighbouring districts in the province of Bihar.

As the forests in the catchments of these streams are largely denuded, run-off of the rain water falling on the catchments is rapid, and during the rainfall the rivers are in flood. But they run low between the rainfalls as they have very few other sources of supply. Inundations of the country by these rivers, owing to their highly fluctuating water level, is unsuitable for cultivation. A large area in this region has, therefore, been protected by embankments to shut out the floods. The fields thus deprived of water require irrigation. To meet the situation the construction of irrigation canals, with sluices at their heads to control the supply, is necessary. A scheme which would cover an area of about 300 square miles of land in the districts of Burdwan, Hooghly and Howrah has already been prepared, and the project is ready

to be put into execution. It consists of the construction of a barrage across the river Damodar near Burdwan in order to raise the water level for the purpose of obtaining a flow of gravity. A sluice erected on the river-bank at the head of the canal would control the flow of water into the country. In order to ensure an adequate supply during the low stages of the river, it is proposed to construct a masonry dam across a gorge in the river Barakar—a tributary of the Damodar—and convert it into a reservoir to conserve about 5 000 million cubic feet of rain water.

The districts which this scheme would serve are very malarious. It is therefore under contemplation that, in addition to the irrigation of the fields, the canal should supply sufficient water through the decadent channels of the locality to flush out the stagnant and dirty pools of water which are believed to be causing malarial infection.

The scheme has been sanctioned by the Bengal Government and it is waiting for funds for its execution. Two other similar schemes, which would draw water from the rivers More and Darakeswar, cover an area of about 250 square miles of highland in the districts of Bankura and Burdhum, the two driest districts of the province. These are also ready for execution.

The silt carried in suspension in the water of the rivers from which these canals would be fed is rich in plant nutrients, such as nitrogen, potash and phosphates. The proposed irrigation would therefore supply the necessary manure to the soil and thus increase the yield.

The country along the river Damodar from about 20 miles above the town of Burdwan, is below the flood-level of the river. To protect this country and the crops from damage by the sudden and heavy floods of the river embankments were constructed along both the banks. It was found difficult to maintain both these embankments owing to the floods being very high and it was considered necessary to demolish the embankment along one of the banks with a view to reducing the flood level by spreading out the river discharge. Since the country behind the embankment along the left bank was more important as it protected important towns and also roads and railways leading to Calcutta the right embankment was removed in the eighties of the last century. It was then thought that the confinement of a silt-carrying river within embankments would lead to a progressive silting of its bed and increase its flood level. The demolition of the embankment, it was expected, would divert the silt from the river and the channel would improve giving a better section for the passage of floods. The flooding of the country under these new conditions would not be heavy and damage to crops and property would be low. But it turned out that the lowering of the flood level was only temporary, high sandbanks soon formed and the flood level is now almost as high as before. The sand brought down with the flood-water has been deposited on the countryside and it has rendered the soil almost barren. The low pockets far away from the river which the rolling sand could not reach, are still fertile, but the crops here are damaged almost every year by uncontrolled flood water. The extensive spreading of flood water over the country has reduced considerably the flow in the river in its lower reaches and as a consequence the channel has shrunk to about a fifth of its original size. The river cannot accommodate even an ordinary flood and the water rushes to the low pockets. Several other embankments in the district of Midnapore along the rivers Selye and Darakeswar have also been abandoned. The effect of the removal of these embankments is much the same. That eminent irrigation engineer, the late Sir William Willcocks in his lectures delivered in Calcutta on the ancient system of irrigation in Bengal did not on this account speak favourably of the removal of these embankments.

Actual observation in the river Mississippi does not support the theory that if a river with silt-laden water is restricted within embankments, it silts up progressively. It has been noticed in the river Damodar that the dispersal of water away from the river leads to a deterioration of the channel.

It is now well known that where the surface slope is the same, a shallower channel has a greater silt-carrying capacity than a deeper one. This has been expressed by Kennedy in the following formula $V_0 = c d^m$ where V_0 = critical velocity. A lower velocity would cause silting of the channel and a high velocity produce scouring, c and m are constants which vary with the nature of the silts in suspension in the river—

water—their values are determined by observations in existing channels d = average vertical depth of water in the channel This is the critical depth corresponding to the critical velocity

When a silt-charged river is embanked its section changes until the critical depth, which would move the silt charge forward under the altered condition, is obtained There is no further deterioration after this régime condition is reached When the river becomes shallower it increases in width to accommodate the discharge

Higher flood in the rivers mentioned before was not due to the existence of the embankments along the rivers, but to deforestation in their upper catchments. The flood embankments removed should, therefore, be reconstructed to give protection to the large area of land which is lying almost fallow due to the damage by floods The lowlands which are still fertile would immediately give good returns, the high fields close to the rivers would be spared any further deposit of sand, while the sand already deposited would gradually be washed down, with the result that the soil would regain its original fertility The proposed afforestation near the western border of the province would reduce the flood level caused by the arrest of rain water precipitated on the forests

There is a persistent demand among the public for restoration of the embankments The fear that it might raise the flood level of the rivers has so far stood in the way But there should be no trouble if these embankments be constructed well away from the river-banks, so that an ordinary high flood could be accommodated within the embankments In addition, escapes should be provided in the embankments at suitable places to pass the extra discharges at extraordinary high floods on to the country behind the embankments Discharges through the escapes would cause some damage to the country but as extraordinary floods occur at long intervals of years these damages, compared with the present conditions, would be negligible A similar proposal was made in connection with the Mississippi embankments by the commission which deliberated on the flood problem of that river some ten years ago

The river Kalighye, which rises from the highlands near Khargpur overflows a large tract of low country If the highland near Khargpur, now denuded, were planted with forest, flood in the river Kalighye could be considerably lowered and damage to the flooded lowlands reduced Patches of cultivation in the highland, which now suffer from want of water during the dry spells, would benefit from the seepage from the forests The situation is similar in the low area near Kandī in the Murshidabad district and similar measures would be beneficial

There is a large tract of lowland in the Contai sub-division of the district of Midnapore, which is protected by a sea-dyke and several other tidal embankments Crops in the pockets of the lowland are frequently damaged owing to overflowing caused by heavy local rainfall, as the existing drainage channels cannot remove the excess water sufficiently quickly The drainage basins are saucer-shaped and the rain water from the surrounding highlands runs into the pockets much too quickly It should be possible at a low cost to arrest the run-off from the higher fields and divert it direct to the drainage channels before it reaches the pockets As the area of the low pockets is fairly large, this proposed improvement in drainage would give a substantial increase in the return.

The impression that all embankments are harmful led to their neglect, and their sections are in many places too weak It is on this account that extensive damage occurred during the cyclone which passed over the south western part of the province in 1942. The sea-dyke near Contai and several other embankments of this locality were wrecked and the hinterland was flooded with sea water The crop was almost wholly destroyed and there was a severe famine Neglect of these tidal embankments is very harmful, as inundation by sea water spoils the soil for cultivation until the salt is washed away during the rains.

Embankments should have a freeboard of at least 3 feet over the highest flood-level and be wide enough to cover the hydraulic gradient when water pressing against them is at its highest level

The river Ganges, which now passes through the eastern portion of the province, used to flow about 400 years ago along the river Hooghly Bhagirathi. The change in the course of the Ganges apparently took place owing to the river finding a shorter

way to the sea. A look at the map will show that the present course is still a little shorter even after delta-building in the sea for so many years. There had been attempts at improvement of the offtake of the Bhagirathi river from the Ganges, but they were not successful and the river Bhagirathi is gradually deteriorating. The diversion of the Ganges has affected the other rivers of Central Bengal as well—such as the Jalanghi, the Mathabhanga, the Bhaurab, the Nabaganga and the Ichhamati. Owing to the deterioration of these rivers drainage of the country lying between the Bhagirathi-Hooghly and the Gorai Madhumati Rupsa has been seriously affected. The situation has also been affected by the construction of the railway lines from Calcutta to Goalundo, to Khulna and to Hashanabad. They run more or less across the direction of drainage and the openings in the lines are not everywhere sufficient to cope with the drainage. Roads across the drainage lines also have insufficient openings. The excavation of suitable drainage channels and provision of sufficient openings in the roads and in the railways would bring under cultivation a large area of lowlands in the districts of Murshidabad, Nadia, 24 Parganas, Jessore and Khulna.

Although the country is below the flood level of the rivers, very little flood water spills over it owing to neglect of the side-channels. The silt borne in the flood water is rich in plant nutrients. In Eastern Bengal, where the river water spreads freely over the country, yield of paddy is about double that obtained in this area—being 1 ton to 1½ tons per acre. Re-excavation of the side-channels, with controlling sluices at their head where necessary, would considerably increase the return from the fields. Sir William Willcocks strongly stressed the necessity of excavation of these channels in his lectures delivered in Calcutta a few years ago on the subject of irrigation in Bengal. With a little financial help and guidance in matters of engineering, the local people should be able to carry out the works on a co-operative basis.

The rivers of Central Bengal formerly had good outlets into the sea. Owing to their deterioration very little upland discharge passes through them, and the outfalls into the sea are now merely tidal creeks. These channels act during flow tides as carriers of the silt brought down by the various rivers into the bay with the upland flood water, and they are forming the deltaic land known as the Sunderban. Where the level of the Sunderban became fairly high the land has been reclaimed by the erection of embankments to keep out sea water. The land thus brought under cultivation is very fertile and is a large source of supply of rice for the province.

The tidal creeks of the Sunderban maintain deep channels where they have plenty of spilling ground during high tide. But when the spilling is curtailed the channels become shallow. This led to the belief that a tidal creek cannot maintain itself unless it has a large spill area. It is argued that the entire silt charge brought up by the stronger velocity of the flood tides cannot be moved down by the ebb current, and that a portion of the silt is deposited in the bed of the channel unless the river has a spill area where the silt can drop down. This is an exaggerated view of the evil effect of depriving a tidal channel of its spill. A tidal creek which has a large spill area maintains a deep channel for the movement of the larger volume of water. When the spill area is cut off the creek assumes a shallow section compatible with the smaller flow and it continues to retain this section provided no obstruction is offered to the tidal impulse.

Professor Reynolds of Manchester University as the result of research in this connection in his hydraulic laboratory came to the conclusion that a tidal creek will keep open if it widens gradually and if it has a length of $8.5\sqrt{h}$ miles where h is the rise of tide at the mouth of the estuary in feet. The result of this experiment seems to be confirmed by the steady condition of the tidal creek in the Sunderban known as the Mom river. It has a length of about 25 miles with an average tidal fluctuation of about 10 feet.

The present policy, which has practically stopped any further reclamation of the Sunderban, is not therefore justified. When any land rises so high that it would drain easily into the neighbouring creek during ebb tide, its reclamation should be permitted.

It is found from observation that the formation of land from tidal spill can proceed to a level about a foot above the average high tide level of the monsoon and beyond it the rise of the spill area is not appreciable. A spill area at this level does not, therefore

help in arresting any silt in the river-water and it does not contribute towards proper maintenance of the river. In the circumstances, there should be no objection to reclamation of such areas.

Until recently the city of Calcutta was draining into a creek in the Sunderban—namely the Bidyadhari river. The colloidal matter contained in the sewage of the city and the solid matter washed down from the streets caused silting of this river and its branch, the Piali river, to such an extent that the drainage of the city has been affected, and a new outfall into the river Kultigong is under construction for the diversion of the drainage.

The river Bidyadhari and its branch, the Piali river, are the drainage outlets for a large area of rural country approximately about 500 square miles of land. Owing to the deterioration of these rivers their drainage basin remains waterlogged throughout the rainy season and the crop is damaged almost every year. It is necessary to improve these rivers to save the crops and improve the health of the locality. As already stated, a tidal creek which opens out in a funnel shape in its downward course and which has a length of $8\frac{1}{2}$ miles, where h is the average fluctuation maintains itself in a good condition. The tidal impulse does not receive a check in such a channel, and the silt carried in suspension with the flow tide is washed down with the ebb. A scheme for the improvement of the Bidyadhari river and its branch, the Piali river, has been prepared on this line. It should be carried out as early as possible.

Deterioration of the Bidyadhari river has affected its outfall—the Matla river. This is causing difficulty in the drainage of the neighbouring country. Many channels within the jurisdiction of the police station at Kaligunj have also silted up and the consequent difficulty in drainage is causing distress.

The reclaimed area of the Sunderban was full of tidal creeks—large and small—before the reclamation was done. In order to reduce the length of the marginal tidal embankments many of the important creeks which should have been kept open were dammed up and the consequent obstruction to the tidal impulse caused deterioration of the main channels giving rise to the present difficulty in drainage. Large drainage schemes are required to meet the situation.

Reclamation in the Sunderban has all been done by private enterprise. The embankments are in many places too close to the channels and they are mostly of slender sections. Breach in these embankments, resulting in overflooding by sea water is a frequent occurrence. The Government should take them over for maintenance and for carrying out improvements where necessary. The cost involved might be realized from the persons benefited.

Between the river Rupsa and the lower portion of the river Madhumati the drainage condition of the country has been upset owing to changes in the course of the river Bhairab which used to flow through this country. It should be beneficial if channels could be excavated for the introduction of silt laden flood water into the country. Channels should also be excavated where necessary for the drainage of the excess water.

The Eastern Bengal railway line from the Gorai river to Faridpur via Rajhari has very few openings. The same applies to the road which runs parallel to the railway line. Although the river Ganges (known here as the Padma) flows very close, the country behind the railway embankment is, on that account, almost entirely cut off from the flood spill of the river. The soil thus deprived of the manuring silt in the spill-water has lost its fertility. The old spill channels of the Ganges have deteriorated and the drainage system of the country has been upset. A comprehensive scheme, which would involve re-excavation of the spill channels and construction of suitable openings in the railway and the road embankments should be carried out to improve this territory. The scheme would eventually introduce silt into a vast area of lowland lying north of the Madaripur Bil channel. This low pocket would otherwise remain low and the crops in it would always be subject to damage from flood, as at present.

There is an embankment along the southern bank of the Madaripur Bil channel, which was constructed with a view to preventing escape of the clear water of the swamp from the channel, as the flow of clear water would help to keep the channel in good section. But this has produced a bad effect on the low country behind the

embankment, which lies partly in the district of Bakerganj and partly in Faridpur. When the flow was unrestricted the fresh water used to push saline water from the low pocket. But now saline water is creeping up, and the people are clamouring for the construction of embankments to save their land from sea water. Such a solution is, however, not practicable as the land is very low. The reintroduction of more fresh water is necessary to improve the soil.

In recent years there have been changes in the course of the river Arial Khan, which flows close to this low area. Silt laden water from this river should be introduced into the pocket to silt it up to a higher level.

About three centuries ago there was an avulsion in the river Brahmaputra, and the lower course of the river was diverted along the Jumna, which joins the Ganges near Goalundo. Drainage of the country served by the old course of the river, which falls within the districts of Dacca and Mymensingh, is defective. It is necessary to carry out a large number of small drainage schemes here to save the crops from frequent damage.

The forests of Bhowal in the district of Dacca and that of Madhupur in Mymensingh are being denuded. The rapid run-off of rain water caused by the denudation of the former has reduced the underground storage of water in the hilly region, and this has affected the dry weather flow of the river Burigunga, which flows past the town of Dacca—the second largest town in Bengal. Crops in a large area of lowland north of the town are frequently overflowed owing to the rapid flow of rain water from the denuded Bhowal forests. Replanting of the denuded forests would be beneficial to this area. A similar treatment of the Madhupur forest is also desirable in the interest of the cultivation at the foot of the forest, where frequent damage now occurs to the crops owing to premature inundation.

There is a vast tract of low country in the north-eastern portion of the district of Mymensingh which is flooded to a great depth by the river Surma and other tributaries of the Meghna river. The inundation occurs so early in the season that very few crops grow in it. It should be possible to grow the winter rice (Boro) in this area when the land dries up. As this crop requires irrigation, it would be necessary to store flood water at suitable places for the purpose in small reservoirs constructed in the flooded area with earthen circuit dams. As there is practically no current in the flooded area, no appreciable damage would occur to the dams when these would be overflowed. As the soil is fertile the yield should be fairly high.

The increase in population is leading to an encroachment on the hills of the districts of Tippera, Noakhali and Chittagong, and the denudation of the forests is affecting the flood levels in the rivers fed by the hills.

The main river of the hills of Tippera is the Gumti river. There are embankments along the river at those places where spreading of flood water is likely to cause damage to the crops. A thorough enquiry was made recently which proved clearly that these embankments are necessary under present conditions, and that without them the crops would be inundated too early. To keep the flood-level under control replanting of the denuded forest is necessary where possible.

The hill tribes of Tippera, Mymensingh, Noakhali and Chittagong practise a type of cultivation, which is known as Jhoom cultivation. The people do not plough their fields nor do they adhere to any particular field for cultivation. They clear patches of forest land by burning the plants and trees, and with the advent of rain in May and June they plant paddy seeds in holes made with a sharp instrument. The following year they shift to other areas for Jhoom cultivation and the year after to another, and so on until they return to the first area. Formerly they used to return to the same area at long intervals, but now owing to the increase of population, the forests are thus too frequently disturbed for Jhoom and the run-off of rain water from the forests is somewhat heavy. It would be difficult to train the people to any other form of cultivation consequently, terracing of land, as is done in the undulating fields of Western Bengal would not be possible moreover the hills here are mostly too steep to allow of such terracing. In the United States of America where large areas of forests were cleared for obtaining land for cultivation the following remedies were adopted for combating the evil effects of deforestation.

(1) Terracing of land, which prevents rain water from draining off the land too

quickly. In Bengal, dwarf banks 9 inches to a foot high are erected at the lower ends of the terraced fields to retain water in the fields. The check offered by these banks prevents water from running off too quickly and there is no erosion of the finer top soil which provides food for the plants.

(2) Excavation of drainage channels with gentle slopes more or less following contour lines. The earth excavated is thrown on the lower sides of the channels in order to prevent rain water from escaping along the steep hillsides.

(3) Afforestation of the hill slopes where the gradient exceeds 6 horizontal to 1 vertical. It is difficult to control erosion in steeper slopes.

(4) Division of hill slopes into alternate belts of forests and fields under cultivation. The eroded soil and drainage of the cultivated fields are more or less arrested in the forest belts lower down.

Remedy (4) would probably be the easiest to introduce in the Tippera hills.

Conditions in the hills of Chittagong including the Chittagong hill tracts, Mymensingh and Noakhali, are similar to those obtaining in the Tippera hills, and a similar solution is recommended.

The Karnafuli river on which the port of Chittagong is situated, is the main river of Chittagong and the Chittagong hill tracts. Except in the lower reaches where it is tidal, the river is not embanked. But owing to deforestation the flood level is rising. This may require the construction of embankments along the river at the foot of the hills, and immediate measures are necessary to reduce the run-off of rain water from the hills for keeping down the flood level.

Owing to rapid run-off of rain water from the hills of Chittagong and Noakhali, sufficient rain water does not soak into the soil and the underground reservoir of water becomes depleted too early. Consequently, the flow of sweet water in the hill streams close to the sea has been so reduced that tidal water creeps up too close to the fields under cultivation and is causing harmful inundation. The proposed control of the forests would remedy the situation. The large tract of lowland near Feni in the districts of Noakhali at the foot of the hills which is frequently inundated too early owing to rapid run-off from the hills, would also be benefited.

The changes in the river Ganges and Brahmaputra led to changes in their tributaries as well. The rivers Punarbhaba, the Atrai and the Karatoya which are the main drainage channels of the districts of Malda, Rajshahi, Bogra, Dinajpur and Rangpur, have been deteriorated as a consequence of these changes. The drainage system has been dislocated and there are many low pockets which are never drained properly. Resectioning of these channels together with the excavation of drainage channels from the low pockets, is necessary to obtain a good drainage of the country.

Water hyacinth is doing harm to the standing crops in Eastern Bengal. It is an aquatic floating plant, which grows very rapidly and smothers the crop plants. Strong measures should be taken to eradicate this weed from the rivers of Bengal. The flooded districts of Eastern Bengal where this weed grows in abundance adjoin similar districts of Assam, where the weed is giving similar trouble. As the weed floats down from Assam it is necessary that the two provinces should take combined action in the matter.

In short, the following are the remedial works suggested.

(1) Construction of the Damodar and Hooghly Flushing and Irrigation Scheme, the More Irrigation Scheme and the Darakeswar Irrigation Scheme.

(2) Construction of small irrigation schemes including small tank irrigation schemes in the districts lying west of the river Hooghly Bhagirathi.

(3) Drainage schemes all over the province, particularly in Central and Northern Bengal, including provision for more openings in the roads and railways, required for proper drainage and introduction of the flood water which is necessary for giving a healthy flushing to the country.

Earthwork is the main item, and it can be done by manual labour recruited from the poor cultivators during the slack season. As the men have no field work during this period nor any other employment at this time, their engagement on these works will not divert them from their other pursuits while the province will obtain a substantial increase in the produce from the soil.

CHINESE POETRY IN WAR-TIME

BY PROFESSOR LU CH IEN

CHINA is a country where poetry has been used as a means to educate the people. Ancient Chinese theories of education take humanity and moderation as the criteria of good poetry and the habit of using poetry to express such ideas has contributed to building up the peace-loving character of the Chinese. Professor Giles, in his *History of Chinese Literature* describes the outstanding characteristics of Chinese literature as the harmony of literature and morality and all past Chinese poets and philosophers have used poetry not only to express life but also to teach various ideals of human character. Thus the idea of dying for one's country of loyalty and love of society is to be found throughout Chinese literature in such masterpieces as *The Lament of Ch'u Yuan*, the poems of Tu Fu and Hsin Chi Chi and other treasures of the Chinese people. During the nineteenth century, however, China was in an unfortunate position and Chinese poets, under oppression, devoted their energy to the improvement of their technique, stifling the real spirit of poetry. Then as a result of the May the Fourth movement of literary renaissance the old traditional forms were destroyed making way for the modern poetry which uses the vernacular and has been influenced by foreign forms. But although this poetry has been developing for twenty years, yet both among the common people and the educated class classical poetry still has its place for the symmetry of the old forms is based on the characteristic of the Chinese language, and it has a better musical quality, so that it is more easily appreciated than modern poetry and is still popular.

Since the war there has been progress in all departments of Chinese life, including poetry. We shall deal with tendencies of modern poetry in a later essay, and content ourselves here with mentioning certain characteristics of the old poetry.

As already noted the progress in the old poetry during the past hundred years has been limited to technique with a resultant lack of vitality but since the war a new spirit has been infused into Chinese poetry, and although this may call to mind the Western proverb "New wine in old bottles" the new content has not burst the old forms of poetry in China. Instead not only is the content new, but the form has also been renewed moulded by the workings of the new spirit. This confident assertion is based on my own experience since the war as editor of a magazine called *The Poets Forum* and this essay is written to give a general idea of developments in Chinese poetry to our friends abroad.

On July 7 1937 the roar of guns at the Marco Polo Bridge announced the beginning of a great era. A group of poets meeting by accident at the time, resolved to unite their efforts in order to write of this tremendous theme. On December 4 of the same year the *Chinese Weekly Review* issued a war time special called *China at War* offering two thousand five hundred American dollars for the best poem on the war in Shanghai between the Chinese and Japanese forces. At that time Chinese papers throughout the country printed many poems on the war but since there was no magazine devoted to poetry I started *The Poets Forum* in Hankow.

My countrymen love poetry because it is an expression of moral character and all the great men of China even at an early age have written poems which are remembered and treasured. Thus when our great leader President Chiang Kai Shek was only thirteen and studying in his grandfather's home, his tutor asked him to write two lines on the subject of bamboo, and he wrote these two lines:

In my gaze the mountains are full of bamboo
Which make even summer appear cold."

Bamboo here symbolizes a man's lofty character—a common enough device in Chinese poetry—and the statement that even in midsummer bamboo can make the day less sultry reminds one of the verse in the Old Testament, "As the shadow of a great rock in a thirsty land," revealing the nobility of character of the boy who wrote

it Again, when he was twenty-one years old our leader wrote a poem in which occurred this line

I will recover the sacred land and fulfil my duty

The President has now no time to write poems, but many of our generals at the front are fond of writing poems during their leisure, thus carrying on the tradition of certain heroes in Chinese history such as Yuch Fei of the Sung Dynasty or Chi Chu kuan of the Ming Dynasty, who, apart from their glorious achievements in war, also left us many great poems

Chinese traditional poetry can be divided roughly into two groups firstly, the classical poetry consisting of lines of five or seven characters or of a mixed number of characters, a form that was largely used from the Han to the beginning of the Tang Dynasty often for poems of a considerable length secondly, the later form of poetry originating in the Tang Dynasty, comprised four lined epigrams and eight lined couplets the latter having either five or seven words to one line This form was the one used in the official examinations and its rules were very strict. The four lined epigrams contained first five lines, and later four lines of which the second and fourth were rhymed while the first line might have the same rhyme or not.

Four lined epigrams were a popular form of poetry and particularly suited to war time, when poets had little leisure for correcting and polishing their poems Admiral Sah Chen ping, a retired officer of over eighty years, has written many poems in this form since the war, expressing his loyalty to the Republic and his respect for our leaders while two other generals Kung Keng and Lin Hu have also written much during the war Thus these veterans, although they are too old to participate actively in the war still express the same spirit as that which animates the soldiers at the front.

Hsu Ch ung Hao another old general of the early days of the Republic, left active service long ago and has been for ten years Secretary-General of the Examination Yuan Since the war he has written many poems recently printed in which he sings of war time achievements and praises Free China, especially the province of Szechuan, with its beautiful and magnificent scenery He travelled with Tai Chuan hsen President of the Examination Yuan, to Hsi K ang, and wrote over a hundred poems on the social customs there Another general, Yao Tsung, has printed a volume of poems since the war, in which he describes his travels and these poems are considered superb by Chen San li, an old poet. Chen Ming shu, a member of the National Military Council, is also a general with a philosophical mind and literary taste, who considers that all the poets since the Sung and Ming Dynasties have written nothing but repetition, and who has tried to express his real feelings

I will now mention a few generals who are still at the front. One is General Ch eng Ch ien, a scholar of the old school with a well-developed literary taste, who, although he has spent many years in war has never forgotten his poetry In the twenty-seventh year of the Republic (1938) he wrote a long poem on the war in couplets using forty-two rhymes and eighty four lines to which he later added a sequel of the same length. Another long poem he wrote is *The Achievements of Dr Sun*, which ranks as one of the masterpieces of modern Chinese literature. General Ten Pao-shan has also written poems since the war, including one called *The Red Cliff*, which describes the loftiness of the mountain, symbolizing the sternness of army discipline, and which should be read by every soldier General Sun Wei yi who fought against the enemy for three years in the Chung Tiao Mountains sometimes also wrote poems, such as *Crossing the River at Midnight* But these poems are not ones that enter the experience of ordinary poets.

Among the younger generals there are even more poets Lo Cho-ying for instance, has written many poems on his experiences in the war and so has Huang Chieh, from whom we quote these lines

In hard fight under the Southern sky
Life passed like a dream
When shall we recover our north-eastern provinces?

Chang Shih-hsi has also written poems on the war, and Chen Ch'eng-kan, whose pen name is A Soldier of the 138th Division has written descriptions of marches in the mountains. Chen Ch'an-hsing, a young airman, is also a poet. These men have described their war time experiences in their poems, so that their writings have become historical records of the war. Thus in a description of China's war-time poetry it is only right that the actual participants in the war should be mentioned first.

Regarding the poems of other poets I shall take those of Yü Yü-jen as the model of China's war-time poetry. In a previous article I have described the five characteristics of his poetry as follows. Firstly, he can describe in his poems whatever comes into his experience during his travels: whether foreign custom or scenery or personal feelings, and thus his poems cover a wide field. In his descriptions of his travels in Soviet Russia, for instance, he uses images from actual life which no Chinese poet has ever used before. Secondly, he has not only written of the revolution but has also made many records of the various wars in China since the establishment of the Republic and these accounts are both lively and accurate. Thirdly, in his long poems he has adapted all the virtues of ancient poems to form a new style which is magnificent. Fourthly, his short poems are heroic, since he is a Northerner and has none of the softness of Southern poets. Fifthly, he has used the most familiar words and constructions to embody new ideas. Thus, since the war, his way of writing has come to be known as The Yu Style and he has had many imitators among the younger poets. I shall quote a few examples from his poems.

THE LONG AND SHORT POEM

The long song is long, the short song is short
The sacred war takes its course,
And brothers follow each other
To lay down their lives for the country
Until the barbarians are defeated
And we return home singing

The short song is short the long song is long
To die for one's country
Is eternal glory
We love our dear ones, we hate our foes,
Our heroes are not afraid and the humane need not fear fate
But let us rise up together to defend our sacred land

THE FATHERLESS CHILD

The whole land suffers beneath fire and sword
Where can the exiled people go?
The fatherless child sheds tears
And wets his mother's garment

In the East village the house is burnt
And people have fled from the West suburb
My father went out to fight the barbarians,
But when did he die on the battlefield?

There was a young girl in the neighbour's house on our left
And a little boy in the right hand neighbour's house,
But the mad brigands took them away
I cannot tell what they wanted to do with them

How many orphans has the battlefield made?
How many tears are shed for the fatherland?
Who will defend our fatherland?
And the poor young ones of the fatherland?

SONG OF THE WOUNDED SOLDIER

A man must be a soldier,
 With our lives we must win back peace,
 And I am the lucky one,
 Having travelled a myriad miles on the battlefield
 Our fatherland is threatened with great danger
 As war rages like a mighty wind,
 And for every inch of our fatherland there is an inch of blood
 For the nation is supreme and life held cheap
 For barbarian horses ravage the land
 And millions of refugees toil at the front
 Then, glorious heroes
 Bind up your wounds and pacify the country

The heroes of old
 Won glory by serving their country
 Shedding their blood, slaying their foes
 They brought no stain on their lives
 Now the Eastern battlefield is linked with the Western battlefield
 Millions of our brothers are martyred for their country,
 Going out to risk their lives
 What does it matter if hands ears and fingers are wounded,
 If the doctor says I shall be strong again in a hundred days?
 So in dream I march again to war
 Where peach blossoms fall and willows shed their catkins
 But I would rather stain the grass with blood
 —Do not weep for am I not laughing?

THE MOON FESTIVAL

The wounded soldier sighs
 The sun has set and the moon rises
 For he complains that carefree people simply enjoy the moon
 But it was in moonlight that enemy planes wounded him
 —The moon is setting, my bones are aching,
 The fate of the country is at stake
 And I am fortunate to be in the sacred war
 Last year I sang and danced at the moon festival in the army
 But this time I grieve that I cannot participate.
 The moon is very full tonight,
 It is the time when our soldiers defeat the barbarians,
 And then they will return singing
 So I am content to have my body disabled
 For the sake of the country

These are masterpieces which illustrate the new life which has come to Chinese poetry from the war. The war has indeed, written a new page in the history of Chinese poetry.

Many new poets were inspired by Yu Yü jen, while certain older poets were also influenced by him. Chia Chung-te, for instance, who is carrying on political work under General Yen Hsi-shan in Shansi, has written a book of poems in this new style in which he has enumerated the following five rules:

1 Poets should write on ordinary topics in poetic diction, for it is not necessary that all people should understand poems, although, on the other hand, strange phrases and archaic words should be avoided.

2 Poets should express themselves in their writing: there are many things peculiar to the modern world, and it is not enough simply to imitate the ancient masters.

3 The ancient masters all have good points which should be imitated, but it is not enough to study one school of poetry alone, for that will limit one's achievement.

4 Poets should not write until they have pondered long over their subject

5 Even the ancient writers had no objection to satires and complaints so now that there is freedom of speech in China poets should express their beliefs frankly

Since the war Chia Chun-te has written many poems on the people of Shansi for he is a native of that province, and his style somewhat resembles that of another famous Shansi poet, Yuan Hao-wen, who lived about a thousand years ago

Yang Yung-ling of Szechuan, who participated in the reconstruction of Sikang has described in his poems some of the difficulties of national reconstruction. The great Tibetan Buddhist scholar, Hsi Jao Chia Ch'o, writes poems in Tibetan, and below is given the translation of a poem he wrote one morning to me when we were together in Chungking

I love my friend whose heart is like the lotus
And whose poetry is fresh and fragrant
I see the flag with the blue sky and the white sun
Floating over high mountains and deep valleys.
May this ancient race gird up its loins
To annihilate the dwarfish monster of the East
And I will come to pour out my bright blood
For China the splendid and magnificent

Jung Huang of Mongolia has written poems in Mongolia and Chungking and it is a characteristic common to both Tibetan and Mongolian poets that their style is simple, varied and forceful

There are other Chinese Buddhists who have written good poems since the war foremost amongst them being T'ai Hsu, whose name is familiar to our foreign friends: he prefers the poetic form which has lines of six words, and although this is the form commonly used for Buddhist epigrams, the content is concerned with the war and the modern world. In addition there are two monks Kuo Ling and Ling Hsi the former living in Omei Mountain

I shall say no more of these poets but I wish to lay stress on the fact that since the outbreak of war Chinese poetry has entered upon a new path, and all who make anthologies of Chinese poetry must be profoundly conscious of the new vitality in Chinese verse. I myself have made an anthology of Chinese patriotic poems from ancient times until the present day, choosing those which may best serve as models for contemporary writers. Owing to such an introduction from myself and others, two poets have recently achieved prominence: their lives and work making a deep impression on this generation. One is Ch'iu Feng-chia who lived from 1864 to 1912, and the other is Wu Fang-chu who lived from 1896 to 1932. Ch'iu Feng-chia was a Cantonese, and during his father's time his family moved to the island of T'ai Wan (Formosa). In 1889 he passed the official examination and became a teacher there, but five years later China declared war upon Japan to protect the integrity of Korea, with the result that the next year T'ai Wan was annexed by the Japanese, and Ch'iu Feng-chia then made himself the head of the guerilla forces who harassed the enemy and set up a republic in T'ai Wan. This first republic in Asia only survived for one year for after severe fighting against the Japanese the troops of Ch'iu Feng-chia were defeated, and he himself returned to Canton, where he wrote his poems, expressing his anger against the Manchu Government and his longing for the island of T'ai Wan. He died the year that the Chinese Republic was established leaving fourteen books of poems, but since traditional scholars at that time cared only for technique his poems passed almost unrecognized, and it is only since the war that they have been widely read, his complete works having recently been published.

Wu Fang-chu, the second poet mentioned, was a Szechuanese whose short life was a poem in itself. The year that Ch'iu Feng-chia died he entered Tsinghua University, but was dismissed because of his support of a friend who had been wrongly treated. He lived for some time in extreme poverty studying hard, and then taught as professor in the North-eastern University, Chengtu University and

Chungking University He was much influenced by Confucian philosophy, but was above all a patriot, and believed that Chinese poets in the past had fallen into four mistakes

1 Although too many poems were written the great majority were imitations, filled with laments and the fear of death

2 Too many poems confined themselves to such subjects as scenery and pleasure

3 Chinese poets were indolent and proud, and possessed a strong escapist tendency

4 Too many poems were written on occasional topics, and were dry and uninteresting

Wu Fang-chu believed that Chinese poetry was capable of expressing lofty and beautiful ideas, and he himself wrote many poems before the war, in the last of which he praised Dr Sun Yat-sen the Father of the Republic He aspired to write an epic, but he did not live to realize his ambition It is generally believed however that if he had been spared to this heroic period he would have achieved great things, for he was one who did much to lead modern Chinese poetry on to its new path

Apart from the *shih* style of Chinese poetry there is another style of poetry called *tzu* which originated when certain poems were set to music at the end of the T'ang Dynasty The lines of such poems are irregular, but each *tzu* had its definite form, being restricted by the music to which it was set The music of *tzu* has unfortunately been lost at the end of the Sung Dynasty, but later poets continued to write in this form, which could be divided into two kinds, the short *tzu* consisting of about fifty words and the long *tzu* consisting of from about a hundred to three hundred words Poems in this form were usually used to express emotions of a gentle nature, until Su Tung po and Hsin Chi-chi began a new tradition by using *tzu* to express heroic ideas, but they had few followers in this style In the early days of the Republic few writers wished to enlarge their poetic vision by writing in the heroic style, but since the war there have emerged several followers of the school of Su Tung po, although they are few compared with the poets who write in other styles Since there are not many examples of the modern *tzu* I will introduce certain of my own poems in this form which have been collected in a volume called *The Trumpet of National Resurgence* published in Hankow, Chungking and Chengtu, and now being reprinted in various war areas, since they are in demand as the best-seller among collections of modern poetry A few examples will suffice to illustrate this style

PREFACE

My soul, once proud has grown less bold
But who will sing so wild a song?
The accents of the bards of old
Cold and unroused have slept too long

My verses herald a new dawn
Of this resurgence I am part,
Although my skill is faint and worn,
Yet all I write comes from my heart.

TO HIS SON

Son do you know the state of things today?
Our life is like a boat that drifts away
To play the man you must have courage rare,
And fortitude to meet rebuffs and care
And so Life's burden on your shoulders bear

For us to write about the war is vain,
No victory shall we, by speaking, gain
It matters not if but bare hands have we,
For when the end is reached a change must be,
Only we must hold fast integrity

AFTER THE FALL OF PEKING

I cannot bear the map upon the wall,
 For green of the West Hill I straight recall,
 And ever with this anguish deep I yearn
 That makes men grieve when toward the North they turn

All men awake, but I indulge in wine
 Throughout the earth with tears the homeless pine
 War winnows out the firm from feeble one
 Do you not blush, sunflower, to face the sun?

Among the imitators of the style introduced in *The Trumpet of National Revurgence* Chi en Shan k ai is probably the best, who has given an excellent picture of the magnificent view from Chungking, our war time capital, while many elder poets, such as Ch ou Shu an, Ch en Fei-shih and particularly Ling Ken po and Wang Lu yi, have also been influenced in their style

In the past when poets described scenery it was usually restricted to the Yangtse River Valley, few writing of outlying regions such as Mongolia, Tibet, Kweichow, Yunnan or Sikang, but since the war the poets horizon has widened and Lau Ting ch uan and Tsen Hzi en have written poems in Sikang on the snowy mountains of Tibet and the Buddhist monasteries there. A young scholar, T'ang Kuei-chang who has made an anthology of Sung poetry, has written poems on new subjects such as *Seeing Friends off to the Army* and *The Bayonet*. Such poems could not be seen before the war and although their number is still small, yet each poem is filled with the spirit of war showing that the poets of China are completely mobilized

There is another form of Chinese poetry called *ch u* which originated in the Yuan Dynasty and which is an even better medium for the expression of thoughts than the *tz u* since the language used is colloquial, unlike that of the *tz u* or *sh i*. It used to be said that the *ch u* form was derived from the *tz u*, but actually such is not the case. The Mongolians have two kinds of poetry, poems and songs, the latter consisting of lines of no definite length thus providing greater freedom of expression and it is from these Mongolian songs that the *ch u* are derived. The music of this form of poetry has not been lost, so that it is the only kind of poetry in China that can still be sung, but few writers use the *ch u* form because it is more complex than the more ancient styles, having to conform to a definite musical pattern. There are two kinds of *ch u*, the long and the short, the long being formed by linking together several short poems. Since the war, however this form of poetry has been more widely appreciated and Yu Yiu jen (whom we have mentioned earlier) has written poems in this style perhaps it is no coincidence that he comes from Shansi province, where there were many writers in this style during the Ming Dynasty. Shao Lu tz u, the former ambassador to Moscow, has also written *ch u*, and we will quote here a short poem which he wrote in 1939

We have fought for over a year,
 And our determination is increased
 We shall fight on ceaselessly on all fronts
 For the spirit of our army is unconquerable,
 And those who are in the interior strive to reach the front
 To rebuild our nation

Each word of this poem is so forceful that we are obliged to make a new evaluation of this form of poetry and consider it as publicity literature for all our compatriots, whether old or young can sing such poems, and the touring singing groups organized by our Ministry of Education have set many such poems to music and are singing them in all parts of China. I have written poems in this style and will quote here three poems I wrote at Peipei after a speech I made to two thousand young men.

I

I desire all men to be brave,
 Not believing in empty words,
 But taking up their responsibility upon their two shoulders
 Let us raise our flags and shout aloud
 And with clenched fists overthrow all obstacles,
 For then our hearts will know no sorrow,
 But in our shabby blue gowns we will work hard

II

I desire all men to have self-confidence,
 Not living indolently
 But becoming as new men,
 Let us take heart,
Emerging from difficulties and facing troubles fearlessly,
 For the nation depends upon us,
 And we must advance towards the light

III

I desire you to help each other
 Without selfishness
 Working together in harmony,
 For then it is easy to achieve much
 There is no distinction of soldiers, farmers or merchants
 Then arise young men, and do not falter,
 But let us fight the enemy together

These poems were all set to music by a young composer Yin Shang neng. The rest of my poems in this style have been collected in nine volumes and my friend Jen Tai is translating them into English.

The *chü* style of poetry has gained greatly in popularity since the war and is an evidence that the poetic vision has been much enlarged in this great age, taking into consideration the recent progress which we have already mentioned, we are confident that the future progress will surpass the general anticipation. These poems, moreover intensify our war effort, whether in the interior or at the front, and wherever these poems appear, in newspapers, magazines or books, they breathe the spirit of war. Mao Cheh-tung in his autobiography wrote a poem expressing his thoughts and Tung Pi wu sang these lines:

How dare rats and foxes obstruct our path
 Where we hear the clash of resounding swords

Tsen Chi has written in praise of the Chinese Air Force in fact, participants in every field of action are expressing themselves in poetry so that it is impossible, owing to restrictions of length, to mention them all. Apart from these, however, there are also the poems sung by the people, which are not written down and I will make a brief survey of these also.

The poems which are not written down are folk songs. Their characteristics are that they have no definite form, they are not transcribed in writing, they are not composed by professional poets and one poem may not be completed for several years. In ancient times in China the study of folk songs was frequently used to find out the wishes of the people, and therefore many anonymous poets used this style to express their ideas. The greater part of the *Book of Songs* consists of folk songs which were selected and written down by the song-collecting officials of ancient ages. During the Chung Dynasty Tu Wen-lan made an anthology of ancient folk songs, whose characteristic is that they contain strong local colour.

Since the war folk songs have been made in all parts of China, but since no comprehensive collection of these has been made, there must be many good songs which

are still unknown. As editor of *The Poets Forum* I have collected a certain amount of folk poetry, one group of which are known as Flower Songs, these are the folk songs of the province of Chinghai and they formerly dealt with topics such as love, the weather, or traditional stories, but recently friends from that district tell me that there have been songs composed in connection with the war, two examples of which are given

I

Horses speed past upon the city wall,
Flying to the battlefield
I shall be at home to look after the fields
While you my love, go to fight the war

II

Millions the troops beneath the great flag
Advancing together to attack the enemy's headquarters
When I have said goodbye I shall miss you,
But when victory is won we shall meet again

Another group of folk songs are those of the Miao people in the South west and here is a poem which expresses the peace loving spirit of the Miao

There is a tiger on the mountain,
And a buffalo at the mountain's foot
The buffalo can eat its grass
And the tiger can eat its flesh
So living their own lives,
There is no enmity between them,
And so it is with the Miao people
And the people from other parts of China,
Miao and Chinese have no enmity

Nevertheless if there come invaders then the Miao will resist oppression and fight on without faltering, and this determined and resolute spirit is shown in the following two poems

There is a fort in the East and there is a fort in the West
With no definite boundary between them
But if one people invades the other
They will fight it out to the finish

It doesn't matter, so long as one is patient
For patience will bring success,
One thrust of the spade cannot make a well
One stroke of the brush cannot draw a dragon.

So we catch a glimpse of the folk poetry since the war and see that it, in common with other branches of Chinese poetry, has received new life and vigour. Thus we are confident to predict that after the victory is won literary reconstruction will proceed apace in this country, and we believe that all the poets in the world will join with us in praying that that day will come soon.

THE SITE OF THE NESTORIAN MONASTERY AT HANGCHOW

BY STEPHEN D STURTON, O B E , M A , M D (CANTAB)

(With some additional and explanatory notes)

It is a well known fact that there was formerly a Nestorian Church at Hangchow, capital of the Province of Chekiang in China, but as far as the writer is aware the exact site has been long forgotten.

Marco Polo mentions this church in his description of Quinsai or Hangchow as follows: "Il hi a une gliese de cristieniz nestorin solement" (L F Benedetto, *Il Milione* p 152), or "In this city there is, in so great a number of people, no more than one very beautiful church of the Nestorian Christians only" (Moule and Pelliot, *Marco Polo* i, p 339).

The late Archimandrite Palladius of Peking published in Russia in 1873 and at Shanghai in 1875 (*The Chinese Recorder* 1875 pp 108 113) the translation of an inscription of A.D. 1281 which he had found in a scarce book named *Chih shun chên chuang chih* dated about 1333 c 9 fol 8, 9, in which it is recorded how the assistant governor of Chinkiang Ma hsieh li-chi-ssü (Marco Polo's Marsarghis) had built six monasteries at Chinkiang and in Hang-chou at the Chuen-chiao Gate he built the Yang i hu mu la or Ta p u hsing Monastery. Here *hu-mu-la* is the Syriac *umra* monastery. The text and translation of this passage have been published also in the *T'oung Pao* 1915 pp 637, 677 in *Christians in China*, 1930, pp 144 149, and P Y Sacki, *Nestorian Documents and Relics in China* 1936, p 514 (text in Japanese edition, 1935) and the text is quoted in *Tung ch eng chi yü*¹ (ed Wu lin ch'ang ku tsung pien pt 25), c 1, fol. 11.

Valuable light has been thrown on the site of this church by Professor Sacki in his *Nestorian Documents and Relics in China* p 516, by his translation from the *Hsi hu yü lan chih*² circa A.D. 1547, c 16 fol 11v 14r which states: "SAN TAI FU 72 5 (Memorial Hall, or Shrine of the Three Grand Tutors) East of the Chuen Bridge it is the site of the Shih fang Monastery, just west of the Hsi-chün Bridge which was founded by the Yuan dynasty monk Yeh h k o-wên and has long ceased to exist. In the twenty first year of Chia-chung (1542) Hsieh P ei Minister in the Board of Civil Service, built the Hall in honour of Hsieh An, granted the title of T ai fu in the Chin dynasty, Hsieh Shên fu, granted the title of T ai fu in the Sung dynasty, and Hsieh Chien granted the title of T ai fu in the Imperial Ming dynasty etc. The rest of the long passage consists of the lives of the three eminent men. (In the above paragraph a shorter and more correct version has been substituted for Sacki's, which Dr Sturton had used.)

The writer of these notes has long been interested in finding the site of the Nestorian Church at Hangchow, but has hitherto been unsuccessful, even after reading what Professor Sacki has published on the subject, with the important clue of the Shrine of the Three Grand Tutors. Searches near the supposed site of the Chuen-chiao Gate failed to reveal any Shrine of the Three Grand Tutors and none of the small temples near by bear any name resembling this. Old Chinese residents stated that there was such a shrine in the city but that it was in another part. The writer recently noticed a small stone tablet over a gate in the Ch'ang-shêng³ Road near the West Lake in the former Manchu City, bearing the inscription Shrine of the Three Grand Tutors Hsieh⁴, and on examination of the shrine found that it was a single room, not much more than a hovel with the honorific tablets of the Three Grand Tutors on the altar. On being questioned the woman who appeared to be in charge of the shrine stated that it had not always been on that site, but had been removed from the Mao-lao Huang, and that nothing now existed on the old site.

The Mao-lao Huang (correctly Mao-lang Huang⁵) is a lane with a right-angled bend on the south side of the Hsia mun Lu⁶ [running south for about 100 yards and

then (turning east), about 100 yards south west of the Kwang Chi Hospital, in which the writer works. There are two small temples in this lane, but neither of them bears a name in any way suggesting the Three Grand Tutors. The name is however applied loosely to the district rather than to the lane only, as the next street, whose proper name is Chin-ch'ien Hsiang,⁷ is also locally known as Mao-lao Huang.

Further enquiries among old residents elicited the fact that the shrine had stood where there is now a small fish and vegetable market on the north side of the Chien-chiao street⁸ about 300 yards west of the supposed site of the Chien-chiao Gate. Immediately east of the market is a narrow lane now ending blindly and known as Ta tung shan Lung⁹ which is almost exactly co-linear with the west arm of the Mao-lao Hsiang. That this is definitely the site of the Shrine of the Three Grand Tutors, and therefore of the ancient Nestorian Church is proved beyond doubt by the presence of a stone obelisk in the north-east corner of the market commemorating the removal of the shrine in the seventh year of the Republic of China (1918), when the market was established.

The site is somewhat the shape of a church having a long portion corresponding to the nave of a church, and a wider portion corresponding to transepts while beyond this there is a small house containing a stone altar behind which are three vacant panels said to have been occupied by the tablets of the Three Grand Tutors. Is it too fanciful to suggest that this altar or at any rate its materials, may have survived not only from the Shrine of the Three Grand Tutors but also from the Nestorian Monastery of the Cross which stood here before the shrine?

To the above notes of his most interesting discovery (made, it should be noted early in 1942 in a city occupied by the Japanese) Dr Sturton added a short paragraph about the Mao-lao Hsiang suggesting (1) that this lane may formerly have run straight through to the Chien-chiao Street on the line of the present Ta tung shan Lung, and (2) that the name Mao-lang with its local corrupt pronunciation Mao-lao may be a remnant of *hu-mu-la*¹⁰ which was the regular transcription of the Syriac *umra* or monastery. With regard to (1) it must be enough for the present to say that the Mao-lang Hsiang is recorded apparently in its present position in the *Hsi hu yü lan chih* circa 1547 and in the *Wan li Hang chou fu chih* circa 1600 while in neither book does it appear among the lanes which run into the Chien-chiao Street. And with regard to (2) that Dr Sturton's idea may have been unduly encouraged by Sacki who for some reason transcribes the Syriac word as *mura* in place of the more usual *umra* that the colloquial omission of the final nasal -ng is not very unusual in the dialect of Hangchow, and that the name does not seem to be really difficult to explain otherwise. One might even suggest as a mere guess that the lane was named after the La pu tso shih lang Mao Tsan¹¹ a local resident who obtained the great distinction of being Chuang yüan¹² in the examinations of 1538. And there is so far no evidence that the old site of the shrine was ever in the Mao-lang Hsiang beyond the word of the lady in charge of the present shrine and she, if she had any real knowledge of where the shrine had formerly stood, must have been using the name as applied to the district rather than to the lane.

The names of many of the lanes in the neighbourhood have unfortunately been changed in the course of years. The Ch un hsi¹³ (or Hsi-ch un) Bridge is now called Chang-chia¹⁴ Bridge, and there were formerly both Ch un-hsi Hsiang running into the main street from the south, and Hsi-ch un Hsiang¹⁵ running into it just opposite from the north, while the name Tung shan Lung¹⁶ does not appear in the topographies which have been consulted dating from circa 1547 to 1718. If by chance this latter alley represents the old Hsi-ch un Hsiang we should be tempted to correct the text of the *Hsi hu yü lan chih* to read just west of the Hsi-ch un Lane in place of just west of the Hsi-ch un Bridge. But this is only a guess which must await further investigation.

The text translated above from the *Hsi hu yü lan chih* (ed. *Hsi hu yü lan*) c. 16, fol. 11v, is given below.¹⁷

Another account of the San ta i fu tz ü based perhaps partly on the *Hsi hu yü lan chih* is found in the *Chien t'ang hsien chih*¹⁸ prefaces dated June, 1680 and October 31, 1718, c. 13, fol. 26v which may be roughly translated as follows

HSIEH SAN T'AI FU TZ Ū East of the Chien Bridge, the site of the old Shih fang wā, for making offerings to the Chin T'ai fu Hsieh An, the Sung T'ai fu Hsieh Shên fu the Ming T'ai fu Hsieh Chien. In Chia-ching the Li pu shih lang Hsieh Pei built it. The site of the hall (or shrine) was formerly very spacious and large, the design great and lofty. At the end of the Ming it was burnt by soldiers. Afterwards it was closed and passed to another family. A descendant, the Chou tung Hsieh Ping kung, contributed money to redeem and restore it. Though it does not attain to one tenth [of the splendour] of the old time, yet the eaves rafters were renewed the winter and autumn sacrifices were restored, and at the time it was spoken of with praise. In it are inscribed tablets. Diffusing fragrance for a hundred generations, and for the Chuang yuan, and the Tsai hsiang all written by Wên Chêng ming of Ch ang chou.¹⁰

Grand Tutor it may be explained, was the honorary title of the second of the highest Ministers of State in the old Imperial Government. The dates, etc., of the three Grand Tutors Hsieh are as follows. An, 320-385 Shên-fu, circa 1140 to circa 1210 Ch ien, 1449-1531. Ch ien was first in the Chu jên examination of 1474, and Chuang yuan in 1475, his son Pei was also top of the Chu jên and obtained a first class in the Chin shih examination. Their respective biographies will be found in the *Chin shu* c 79, *Sung Shih* c 394, fol 71. *Ming shih* c 181 fol 6r. Pei has no separate biography but is included with his father. Wên Chêng ming (1470-1559) was a well known writer and painter. It is not clear whether the inscriptions written by him for this Memorial Hall had escaped the fire or had been restored.

These last paragraphs are of little importance for our purpose, except that by bringing the history of the Memorial Hall down to the end of the seventeenth century they confirm the great probability that the site which has been found is really the original site of the hall and therefore of the church.

With regard to Dr Sturton's description of the market place as having some what the shape of a church, he himself in a later letter calls attention to the improbability that the church should have lain thus north and south when the Syrian Christians were specially particular about worshipping towards the east, as is emphatically stated in the Chinkiang inscription which records the building of this very church. And he would be the first to admit that the suggestion that this was the site of the actual chapel of the monastery cannot be completely convincing unless it is subsequently confirmed by careful excavation. He adds that he thinks that there may have been further buildings to the north where there is now a large private house and grounds to which I have not gained access.

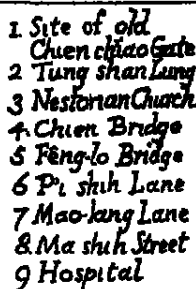
The details given in the *Hsi hu yü lan chih* 180 years or so after the fall of the Yuan dynasty, appear to make it probable that the author had access to some inscription (either the actual stone, or a rubbing of it or the text preserved in some book) or other record which has not yet been traced.

In any case Dr Sturton has proved satisfactorily that the monastery and church founded by Marsarghis in 1281 and mentioned by Marco Polo in 1298 stood on the north side of the main street which still leads in from one of the east gates of the city to the Chien Bridge occupying a corner site bounded on the south by the street and on the east by the Ta tung shan Lung, roughly about 250 yards east of the Chien Bridge and about the same distance west of the site of the old Chien-chiao Gate. And it is, as far as can be learned, the first of the many Christian monasteries which existed in China in the thirteenth and fourteenth centuries to have its position thus exactly recorded.

Dr Sturton ends his paper on Nestorianism in China, to which the above notes were appended, with two short personal paragraphs.

In conclusion I wish to thank my colleague, Mr F B Wood, who has accompanied me on many trips during this investigation and my colleague, Mr Norman Shen who has helped with the local enquiries.

These notes are affectionately dedicated to the memory of George Theodore Moule, of Hangchow, whose twenty years of friendship meant much to the writer, and who passed away on March 9, 1942, less than twenty-four hours after he heard that the site had been discovered.



三巷部橋東可不深志晉嘉廣孫一百書
謝線吏家橋里謝謝縣祀遷頗喬什有明
4 錢 11 章薦也郎傳塘址謝舊姓時中徵
生金刺 14 在僧侍太錢寺傳址他昔之文
長 7 木橋祠元部贈 18 方太祠歸敵稱洲
3 路 忽配傳西吏宋云十明建及不論長
志民 10 春太橋年安云舊甫丕後雖時皆
覽新街 13 三春一謝者東深謝贊還舉額
遊 6 山元 17 配十傳還橋謝堯丘贖重題
胡巷東狀街當二太謝薦傳餘末貲當相
西郎大 12 山也靖贈傳在太郎明損蒸宰
2 第 9 贊東基嘉晉太柯宋侍敵公新元
餘 5 街 16 寺廢奉贈傳安部宏秉幸狀
記祠直郎巷方久以明太謝吏模謝楠芳
城傳橋侍春十建祠皇三傳閒規同棟流
東太薦左配舊溫建甫謝太靖閩州而世

THE KIRGHIZ RESEARCH INSTITUTE FOR LANGUAGES AND LITERATURE

By A. SOLONYTSIN

DURING the past year the Kirghiz Research Institute for languages, literature and history has prepared fourteen papers connected with linguistics literature, folklore, ethnography, archaeology and history, all of which have considerable scientific value.

The linguistic department recently completed a 1,600-page Kirghiz Russian dictionary. This is now in the press and its publication will help to strengthen the cultural bonds between the Russian and Kirghiz peoples.

The folklore department has been very active in its study of the *Manas* epic, the recording of which has occupied the institute's workers for many years. It is an unrivalled example of folklore which has been handed down from generation to generation. The recording is not yet complete, although over 1,100,000 lines of verse are already written down.

Bards who recite the *Manas* —the *Manaschi* —have phenomenal memories in addition to poetic talent. Only this can explain the fact that for centuries hundreds of thousands of verses have been handed down orally.

The folklore department is preparing an academic edition of the epic, and prose versions in Kirghiz and Russian are also being prepared.

The institute is gathering folklore connected with the present war and writers, teachers, local journalists and collective farmers who participated in the war are being invited to help.

Considerable work is being done in the study of past and present literature. The oldest period is covered in Professor Bernstein's paper *The Sources of Kirghiz Literature*. Samanchin, senior scientific worker at the institute, has written a monograph about Tokolok Mondo, a leading Kirghiz *Akyn* (bard).

At the present time Samanchin is working on an analysis of the work of the poet Klycho, founder of Kirghiz written poetry.

An *Anthology of Kirghiz Literature* which the institute is preparing in Russian will acquaint the peoples of other republics of the Soviet Union with the outstanding Kirghiz poets, novelists, playwrights and with Kirghiz folklore.

The department of history is compiling a four-volume monograph history of Kirghiz and Kirghizstan. Among the authors engaged on this work are many representatives of the still young intelligentsia.

The same department has this year begun a study of historical and archaeological monuments in the Tian Shan mountains which is planned to go on for a number of years, an expedition has already started work.

A number of expeditions are also being sent to all parts of the Kirghiz republic to make a deeper study of the language, ethnography and history of the Kirghiz people.

A VISIT TO THE TURKISH PARLIAMENT

By J. BELL

[This talk was given in the Thursday night English programmes over the short wave from Ankara. The wave-length is 317 metres and the time is 21.30 British Summer Time.]

A visit to the Turkish Parliament during a Session is an interesting experience. From the spectators' gallery one looks down into the chamber below, where the

Deputies are assembled. It is strongly reminiscent of the British House of Commons. There are 455 Deputies. They are seated at desks covered with official papers. Few of the Deputies are under forty five years of age. Messengers are entering and leaving the House continuously. Here and there a member leaves his desk and holds a whispered conversation with another member. Women Deputies look stately and efficient and give the onlooker the impression that they realize to the full that the destiny of the Turkish Republic is partly in their hands. The hands of the clock point to fifteen hours. Without any ceremony whatever the President of the Chamber enters and takes the chair. In the British House of Commons the President of the Chamber is the Speaker. He is dressed in black robes and wears a long grey wig hanging down to his shoulders. His office is surrounded with great outward dignity, and before him on the table rests the historic mace, his symbol of authority. All this outward seeming is absent in the Turkish Chamber of Deputies. Nevertheless, the President of the Chamber is the guardian of the dignities in the House. If any member should offend against the rules of debate he is called to order, and if for sufficient reason the President should name an offending member he must at once withdraw from the House.

The arrangement of the Turkish Parliament is very simple. In front of the President and extending the full length of the Chamber are rows of desks with aisles between. The desks are arranged to accommodate three Deputies at each desk. Behind the President's chair are several secretaries busy at their respective tasks. On the President's left are benches which are occupied by the Prime Minister and his Ministerial colleagues.

There is no official opposition in the Turkish Parliament. It is true the People's Party a body of some Party Deputies exercise what might be called a watching brief. This Party meets weekly and subjects all Parliamentary business to a keen scrutiny. Should it disapprove of any measure coming before the House it might at any time offer a united opposition. Nevertheless the Grand National Assembly of Turkey is composed of all the Deputies who are elected in conformity with special laws. The election takes place normally once every four years and the whole Assembly is the sole and real representative of the nation, and in the name of the nation it exercises sovereignty. Each Deputy, therefore is not only the representative of the constituency or district which elected him or her but also of the whole nation.

The President of the Republic of Turkey is the head of the State and in this capacity presides over the Assembly on special occasions and over the Council of Ministers when he deems this necessary.

The Prime Minister is chosen by the President of the Republic from among the members of the Assembly. The other Ministers are chosen by the Prime Minister from among the members of the Assembly. After these members of the Council have been approved by the President they are presented to the Assembly, and the new Government presents its programme to the Assembly and asks for its confidence, and thus under the presidency of the Prime Minister they constitute the Council of Ministers or Cabinet.

The Grand National Assembly of course may always exercise control of the Government and cause it to fall at any time.

On the occasion of my visit to the Turkish Parliament the debate on the annual budget was in progress, and in this instance the procedure was in the main similar to that of the British Parliament. Deputy after Deputy was called by the President of the Chamber. On hearing his name mentioned the Deputy in question left his seat and went to a desk or rostrum fitted with a microphone. From there he made his speech. Sometimes applause broke out, or laughter at something the Deputy said. Each speaker was treated with the same deference and quick dignity.

This short sketch will suffice perhaps to give my hearers some idea of the working of the Turkish Parliament and enable them to realize that the National Assembly of this young Republic is a vital organism developed on democratic lines, ever adapting itself to the changing needs of time, and never losing sight of the fundamental political principle that sovereignty without restriction or condition belongs to the nation.

THE PAN-TURANIAN MYTH IN TURKEY TODAY

BY ALEXANDER HENDERSON

On September 8, 1944, the trial opened before the Istanbul Court of Martial Law of twenty-three persons accused of spreading racist and Pan-Turanian doctrines and of organizing secret societies with the purpose of conspiring for the overthrow of the Turkish Government. The accused included a university professor, high-school teachers, civil servants and army officers. They had been arrested in May, to the accompaniment of the widest publicity in the Turkish Press. The decision to prosecute was taken by the Cabinet on May 18, and in a speech on the following day President İnönü had declared that the Government would not tolerate the subversive activities of the Pan Turanians. Between May and September the prosecution was engaged in preparing their case. The evidence laid before the court included the depositions of the accused, reports of meetings, speeches and correspondence.

The aims of the Pan Turanians are conveniently summed up in the programme of a secret society founded in July, 1941, by Zeki Velidi Togan. Professor of Turkish History at the University of Istanbul. The aims were (1) To unite the Turks of Asia with Turkey to create one racially pure Turkish State (2) as soon as Germany's victory was assured to overthrow by a swift bloodless *coup d'état* the present Turkish Government and replace it by a nationalist Government which would put racialism and Pan Turanianism into effect, (3) to organize the prisoners of war of Turkish race who were in German hands, (4) to conduct propaganda in Turkey for the ideas of the society.

While the starting point of the present effervescence of Pan Turanianism coincided with the outbreak of the German Russian war, the activities of certain of the accused dated back to before the present conflict. In particular, Zeki Velidi Togan had long been politically active. Born in 1890 in Russian Turkestan he had during the Bolshevik Revolution, worked for the creation of an independent Turkestan. He was then secretary of the Central Moslem Organization of Tashkent. In 1922, at a secret congress of the National Union of Turkestan, he was appointed to represent this organization abroad, and in 1923 went to Iran, Afghanistan, and finally Germany. He arrived in Turkey in 1927, was appointed to the Chair of Turkish History at Istanbul University but expelled from the country in 1932 on account of his political activities.

He again spent some time in Germany, returning to Turkey and his professorship in 1938. It was alleged that he then, and again in 1939 after the outbreak of war, tried to organize a movement for the independence of Turkestan and for the dissemination of the Pan Turanian ideology. In 1941 after the German attack on Russia, he sought permission to go to Germany. When this was refused he set to work to establish a secret society.

Togan's principal lieutenant, who later formed a separate secret society Reha Oguz Turkkan, was alleged to have begun spreading Pan Turanian ideas in 1936-37 when he was still a student. In 1938 Turkkan was alleged to have said to one of his associates 'We shall bring off a sudden *coup d'état* with the help of the Regiment of the Guard. We are in permanent contact with a foreign power which will help us with arms. We shall go straight to the Grand National Assembly and seize power by arresting first of all the Deputies. Here is the poison-gas revolver which I got from Germany for my part in the revolution.'

Turkkan began his overt activities by publishing the review *Bozkurt* (Grey Wolf) in 1939. When this was suspended he organized a society called *Kıtapçevniler Kurumu* ('Booklovers Association'), which, under the guise of harmless cultural enlightenment, was intended, according to Türkkan's own statement, 'to spread racist and Pan-Turanian propaganda,' and to prepare the way for the *Gürem* secret society which he later founded. In 1941, permission was obtained to publish

Başkurt again. It soon attracted the attention of the Soviet representatives in Turkey, who cabled back to Moscow long extracts from its articles. The magazine finally came to an end in 1942, and was rapidly followed by *Gökborn*, under the same editor and with the same policy.

Another and rival group of Pan-Turanians was led by Nihal Adsız, a secondary school teacher who is accused of spreading racist and Pan-Turanian ideas among his pupils. Adsız laid especial stress on the necessity of purifying the Turkish race of all non Turkish elements and of ensuring that none but racially pure Turks should hold official positions. Adsız affects a hair style copied from that of Hitler, has designed a colourful uniform for himself and his followers, and likes being photographed in martial postures. He appears to have been a turbulent character since his student days when he was expelled from the Military Medical School for indiscipline. According to his own statements, he was expelled because members of the staff, whom he alleged to be of non Turkish origin had combined against him. He referred to the Director, who he said, was an Albanian, and to his class master alleged to be of Circassian origin. It is obvious that a man with this sense of grievance and persecution would be attracted by Nazi racial theories, there is a clear parallel between the young Hitler in Vienna seeing the Jews as his enemies and the young Turkkan imagining non Turkish Turks as plotting against him.

It is interesting, too, that Turkkan is himself not a racially pure Turk. His great grandfather is stated to have been a *donme*—a Jew converted to Muhammadanism. Turkkan appears originally to have derived his ideas from his adopted father Dr Rıza Nur, editor of the review *Tanrıdağ* which came to an end with its editor's death in 1942.

The movement led by Toğan Turkkan and Adsız has hardly been of serious political import, despite the publicity given to its suppression. That publicity was doubtless designed to placate the U.S.S.R., against which the movement must ultimately have been directed, and to help to improve Russo-Turkish relations. But it is interesting as an example of the influence of a myth on politics, in which respect it resembles the Nordic myth of Nazi Germany.

The idea of a union of all the peoples who speak some form of Turkish originated in the years shortly before the last war from the linguistic movement which aimed at purifying the Ottoman Turkish language of its Persian and Arabic elements, an effort which is still going on. The sociologist and poet Ziya Gökalp, one of the leaders of the language reform movement, may be considered as the emotional promoter of the Pan-Turanian ideology. He is the myth maker, the celebrator of the ancestors of the modern Turks—of Attila, Jenghiz Khan and Oghuz Khan—and of the ancestral home of the Turkish race which is nothing so limited as modern Turkey but a vague vastness described by Ziya Gökalp as "the broad eternal land of Turania".

So far the notion had been little more than the plaything of a few intellectuals but with the entry of Turkey into the war on the side of the Central Powers the astute Enver Pasha and his German friends perceived a practical use for Pan-Turanianism. Combined with Pan-Islamism, or, as an alternative to it, the Pan-Turanian racial ideology was intended to disrupt the Czarist Empire from within, the British Empire in Egypt and India, and to advance the prospects of the Turkish Empire with Constantinople as a double purpose capital—religious as well as racial.*

A compact statement of what Pan-Turanianism hoped to achieve is provided by the *Tasviri Efkar* of April 15, 1918 (quoted in M. A. Çzaplica *The Turks of Central Asia* p. 118, Oxford 1918). "To penetrate in one direction into Egypt and to open the road to the 300,000,000 of our co-religionists, on the other side to advance to Kars and Tiflis, to liberate the Caucasus from Russian barbarism and to occupy Tabriz and

* Lewis Einstein, Special Agent at the American Embassy Constantinople, noted in his diary under May 18, 1916: "I have just gone through a fat dossier on Pan-Islamic agitation which is going on everywhere, mainly with German funds. Here, however, the movement is a failure and has been succeeded by an old Turkish revival (See Lewis Einstein *Inside Constantinople*, London 1917). The old Turkish revival" to which he refers was the movement led by Ziya Gökalp.

Teheran, to open a road to those Mussulman countries such as Afghanistan and India—this is the task we have assumed. This task, with the aid of Allah, with the assistance of the Prophet, and thanks to the union imposed on us by our religion, we will carry through to the end

The practical steps taken to further this ambitious programme included the establishment at the Turkish War Office of a committee, on which sat German officers, for the purpose of organizing propaganda in Persia and Central Asia, with special attention to Turkestan. A German agent, Dr Werner Otto von Hentig, spent two years and much hard cash in organizing fifth column activities in the Middle East and Central Asia. Not surprisingly, von Hentig was again at his old games in the Middle East during the early part of the present war

The most serious result of this Pan Turanian agitation was the rising in 1916 of the Kurghuz tribesmen of the Chu river and Issik Kul region of Turkestan a rising in which several thousands of Russians were massacred. According to the official Russian report the insurgents were led by a Turkish general. The rising was suppressed with great severity and the land on which the Russians had been killed was confiscated from the Kurghuz. (See *A Manual on the Turanians and Pan-Turanianism* H M Stationery Office 1917)

It is doubtless these events during the last war which have caused the U S S R to keep a sharp watch on the relatively trivial manifestations of Pan Turanianism which have appeared in Turkey since 1941

Like other myths, Pan Turanianism has its symbols drawn from a conveniently vague and mysterious past. Prominent among them is the Grey Wolf, already noted as giving its name to one of the leading Pan Turanian reviews. This symbolic animal first appears in Chinese legends of the sixth century A.D. as a she-wolf which had nourished the last survivor—a boy, of the tribe of *Hsiung nu* (the Huns), whose Central Asian empire had been broken up by civil war and the attacks of the Chinese. The wolf and its nursing were conveyed by divine power to a region which would appear to have been the Altai Mountains. Here they passed through a tunnel or cave and came out on a fertile valley, where the wolf gave birth to ten men children who grew up, became warriors and captured wives. Soon a clan using the wolf as its symbol, developed and spread out in the valleys of the Altai. In the sixth century they are described by the Chinese as going by the name of *Tu-ku*, a word meaning "helmet," and adopted by the tribe as its name because the hill around which they had settled was shaped like a helmet. *Tu-ku* is thus supposed to be the origin of the name Turk. The she-wolf is the mother of the Turks and was worshipped by them before they were converted to Muhammadanism.

For the Pan Turanians of today, therefore the Grey Wolf is a powerful symbol rich with associations reaching back into a legendary, mythical past.

The name of Dr Rıza Nur's review, *Tanrıdağ*, is likewise symbolic. The word means literally Mountain of God or Mountain of Heaven. The word *Tanrı* used in modern Turkish as a synonym for Allah, has an ancient ancestry. It originated in the pagan Shamanistic religion practised by the Turks before their conversion to Islam. In the eighth century A.D. the word *Tanrı* or *Tangrı* was already in use as meaning the chief deity superior to the spirits of earth and water, also worshipped by the Turks. As late as the nineteenth century the Siberian Turks generally known as Yakuts, though nominally Christian, still adhered to their ancient pagan beliefs in which the chief god was *Tangra*. Similarly some of the Turkish tribes of the Altai worshipped *Tengere Khan*, the Lord of Heaven. Thus the expression *Tanrıdağ* is like *Borzhom*, powerfully evocative of mystery and myth of the emotionally charged dark backward and abyss of time in which the Turkish race began. The use of *Tanrı* in Turkish racialist ideology is something like the attempt made to popularize Valhalla, Odin and Thor by Nazi racial theorists.

Yet another element in Pan Turanian mythology is provided by *Orhun*, used as the name of the last review edited by Nihal Adıgüzel. The magazine was suspended indefinitely in the spring of 1944 after the publication of two open letters to the Prime Minister which led to student demonstrations in Istanbul and Ankara.

Orhun is another name from the legendary past of the Turks. It is supposed to have been the capital of a tribal State which existed from the latter part of the sixth

century to the middle of the eighth in the region of the Upper Yenisei and of the Orhun (usually spelt Orkhon on English maps) river which joins the Selenga to flow into Lake Baikal. Orhun figures in a celebrated poem entitled *Kızıl Elma* (a symbolical expression for a promised land) by Ziya Gökalp. The poem describes how Turgut, an idealist from Istanbul, goes out to look for the promised land of the Turks. At Baku he meets a girl named Ay and they fall in love. Turgut imagines that he hears Ay say to him: 'The *Kızıl Elma* you seek is here and I am the fairy of the promised land. He consults a local wise man on the significance of this revelation and is told: 'My boy, *Kızıl Elma* is not a promised land already existing somewhere in the world. For the moment this land is an ideal and its sky a dream. Today it is a legend, but tomorrow it will be a reality. The sword and the spirit of the Turks have contributed to the rise of Persia, Arabia and China. They have given each of these peoples glory and history but the Turk has always sacrificed himself for others. His own existence always remained incomplete. He left Turfan* and went to Orhun. Thus, my boy, is what you will find at *Kızıl Elma*. You will find unity, national life. There a collective culture and thought will flourish. We shall see a new Turfan, a new Orhun, a Turkish social being who will cease to ape other peoples.'

In the end the girl Ay, who has also listened to this homily, decides that *Kızıl Elma* can be realized on earth by establishing in Switzerland a Turkish university city where Turkish culture can be studied and developed, and from which scholars, poets, technicians, merchants, industrialists and other leaders shall go out in all directions—to Kashgar, the Altai, Kazan, Konia—to lay the foundations of the national existence. Fortunately Ay has just come into a sizeable legacy, so there is no difficulty about carrying out this project. The poem ends with Turgut of Istanbul and Ay of Baku living happily ever after in their university city in Switzerland.†

This pretty fantasy, though presented in idealistic terms, can quite easily be taken to symbolize the notion of a vast Turanian empire extending from Istanbul to Central Asia by way of Russia. The poem is an important contribution to the Pan-Turanian myth.

A further contribution to the dissemination of the Pan-Turanian idea has been made by the Turks who have resettled in Turkey from the U.S.S.R. or whose families originated in Russia. They are represented in an association known as the Turkish Cultural Union, which aims at keeping alive in Turkey the folklore and culture of the Turks outside Turkey. In 1942 this society held a congress in Istanbul at which were performed folk dances from the Crimea, the Volga, Azerbaijan, the Urals, Turkistan and elsewhere, while a poet recited a piece about Atatürk in the Turkistan dialect. In the same year the society began the publication of a review *Türk Amaç* (*The Turkish Goal*).

In addition to the periodicals so far mentioned are various others operating on the periphery of the Pan-Turanian idea and propagating more or less straightforward nationalism. Such are *Millet* (*The Nation*), *Çığır* (*The Age*) and *Türk Yurdu* (*The Turkish Fatherland*).

This efflorescence of literary, political and historical reviews is evidence of the fascination which a racialist, extreme nationalist and Pan-Turanian ideology holds for the Turkish intellectual.

For the moment Pan-Turanianism amounts to little more than a myth. The attention paid by the U.S.S.R. representatives in Turkey to the propaganda of a few intellectuals was out of proportion to the real strength of the movement. It was, however, understandable for the Russians argued that if these publications were allowed to appear then surely the Turkish Government, which keeps a very strict control on the Press, did not view the Pan-Turanian idea with disfavour. Myths moreover can grow into realities, and they can be exploited—as the Nazis have exploited their racial myth and as they attempted to exploit the myth of an independent Ukrainian State. They might similarly have used the Pan-Turanian ideology as a

* For a description of Turfan today see Mildred Cable and Fancoesa French *The Gobi Desert*, London, 1942.

† See Tekin Alp *Le Kemalisme*, Paris, 1937.

basis for stirring up trouble in Turkestan, as they did during the last war. Russian suspicions were further strengthened by the fact that the Germans were broadcasting propaganda in the form of Turkish spoken in Azerbaijan.

In suppressing the Pan Turanians the Turkish Government took a useful step towards the improvement of relations with the U.S.S.R.

It seems certain that the Nazis assisted the Pan Turanian movement, but it is doubtful whether they were prepared to go very far with it. Such irredentist movements can usually obtain a certain amount of cash and advice from one or other of the secret departments in Berlin. They are helped just in case they may come in useful. And they are dropped the moment it becomes clear that nothing is to be gained from them. For the present the Turkish State is much too firmly founded to be threatened by anything the Pan-Turanians have so far accomplished, whether with or without German assistance.

SOME BRITISH I ADMIRE

I.—DISRAELI

By RANJEE G SHAHANI

As I sit down to write the first of this series of articles, I am seized with apprehension. What do I know of British thought and feeling? Very little I confess. I have given the subject no more than twenty years or so and that is not enough. Fortunately, I am offering neither judgments nor valuations, only some impressions.

I give pride of place to Disraeli, not because he is the most important figure on my list, but because he happens to speak to me most urgently at the moment. Thus, I think, is as it should be. A theme should impose itself upon an author or it will lack inevitability. What comes to us is always finer than what is deliberately created. Manufactured prose is of course an abomination.

But all this is by the way.

I remember very well my first morning in London. Snow, sparkling air, every thing bathed in a dim mysterious light. I was enchanted. This is exactly how I had imagined an English winter to be. Somehow it reminded me of the lovely Lady Christabel.

Breakfast over, I went out. Parliament Square was my destination. Arrived there, I stood gazing at the statue of Disraeli.

My disappointment was great. The pinched ascetic features told me nothing. I had pictured Disraeli as a combination of eagle, leopard and primrose. The stone image conveyed not a hint of this to me. Indeed, it repelled me by its chilling deadness. I turned away, preferring to dwell with the portrait that my fancy had painted for me.

But why this interest in Disraeli? He impressed me in 1928 as an underdog who refused to remain an underdog. Yet he was not a rebel. No, he accepted the conventions as part of the game of life, but, almost negligently, he filled them with new content. What, however, appealed to me most in him was his brave attitude to life. He was no passivist quietly moulded by his surroundings. He was a born fighter. He felt that the stars have nothing to do with our fate, it is in ourselves that we are thus or thus. Such, anyhow, was his faith in *Coningsby*. But what is an individual against a vast public opinion? exclaims the hero of the novel. Divine, says the stranger. God made man in His own image, but the Public is made by Newspapers, Members of Parliament, Excise Officers, Poor Law Guardians. Disraeli did not merely preach. He acted his dreams. He went as far as it is possible for a man to go in a Constitutional Monarchy. He climbed, in his own words, the top of the

greasy pole. In brief, Disraeli's life seemed to me more thrilling than that of Byron or Shelley. These two went out like brief candles in the night, Disraeli lived on not only to savour the *chance* of success but to give Britain a new pride and a new vision.

Today, however, I see him in a slightly different light. He was, I feel, a consummate artist, not, as I had supposed before, a natural force. Of course he was not an artist in the ordinary sense of the word. His books, though live, witty and full of thoughtful things, are not flawless masterpieces. They seem to have been thrown off—they are a part of his surplus energy, the whole of Disraeli is not in them. He was an artist in his life and politics. And these two are what matter to us.

The first twenty years of a man's existence are of vital importance. It is then that the human machine is created to perform its work in the world. What follows after is of much less consequence. After thirty, what is there further left to tell? The rest is but the liberation of a mighty spring, the slow running down of energy. The man recedes to give place to his deeds, whether such deeds be the assault of great fortresses or the cascade of mighty sentences.

The early years of Disraeli were far from happy. Kindly but queer parents, schools where his Jewishness was treated as a stain and a strong feeling within himself that he was somehow different from others. All this preyed upon his mind, and made him create an artificial world of his own. It was a world of colour, luxury and sunshine. And, of course, he was the central figure in it. Life, it seemed to him, would be intolerable if he were not the greatest among men, not one of the greatest, but quite definitely the greatest. He had scores to settle and he would settle them. But what path should he pursue? Byron, he noticed, had done not at all badly by writing poetry. But writing poetry was a risky business. Sometimes fame only came after death. Too bad. What was the use of posthumous triumph? For himself he would rather be Alexander than anyone else.

So he dreamed at the age of fifteen. But it was not enough to dream. He noticed that in the matter of studies, he was not far advanced. He set to work. All day he read, and in the evening he filled his notebooks with such remarks as: Friday, June and Lucian Terence—the *Adelphi*, which promises to be an interesting play. *Henriade*. Virgil and book of the *Georgics* which begins with a splendid invocation to Bacchus. It, however, all vanishes in a sleepy lecture on grafting boughs and lopping trees. Prepared Greek. Grammar etc. And another day. I have a prejudice against Demosthenes and though his speeches are replete with Virtue, Patriotism and Courage, history tells me that he was a Villain, a Partisan and a Poltroon. He was particularly interested in secret societies: the *Vehmgerichte*, the Council of Ten, or the Jesuits. He instinctively approved of the precept: Develop yourself not for enjoyment but for action. And he gave special attention to the methods by which St. Ignatius collected disciples and attached them to himself. The organization of the Catholic Church seemed to him marvellous. Ah, to combine in one person both spiritual and temporal power! To be a Richelieu—how grand!

Almost the whole of the future Disraeli is to be found in these boyish daydreams. But the point that concerns us at present is that he was learning to experiment with himself. Soon, quite soon, he was to learn to experiment with others. And in this double capacity lay much of the secret of his power. It is hardly necessary to say that he used this power like an artist—that is to say, more for impersonal than for personal ends.

He put on many masks—that of a dandy, of a cynic, of a man of the world—but these did not grow into his face. Once he had made people forget that he was a Jew and a commoner—he succeeded in doing that—he dropped all make-believe. Then it was seen that he was at once sensitive and proud. But for long he had to protect himself against the slings and arrows of outrageous fortune. Carlyle was very rude to him. He asked, in his trumpet voice, how long John Bull would allow this absurd monkey to dance on his chest. What was Disraeli's reaction? In 1874, when he came to power, he offered Carlyle the highest distinction he could. He had done a similar good deed earlier, in 1868, when he granted a pension to the children of John Leech, the *Punch* artist, who had plagued him for thirty years. No, there was no pettiness in the man. His motto seems to have been: Understanding is the Siamese sister of appreciation." But he did not find in others the same attitude. Women apart—he

found them the best of collaborators—most men looked upon him as a charlatan. Gladstone, of course, held him to be the Evil One in person. Disraeli did not despair. Little by little the most suspicious and hostile people were won over. This was not a matter of a little judicious flattery. No, it was the triumph of character, genius and talent. Disraeli came to know the British as few have known them. He played on their feelings as a master musician plays on a favourite instrument. Take, for instance, Queen Victoria. She was deeply prejudiced against Disraeli, but in time she came to rely upon him as upon a trustworthy friend. And Sir William Harcourt, an opponent, wrote on the departure of Disraeli from the House of Commons: "Henceforth the game will be like a chessboard when the queen is gone—a petty struggle of pawns." Could a man receive a greater compliment? The once despised Jew ended up by being accepted, both by friend and foe, as a true Englishman. This was Disraeli's apotheosis.

And he was a true Englishman. This explains his politics. He treated it as wise Englishmen always do, as an art. And in all art it is not the generalized qualities that matter, but particular beauties or excellences.

After some fumbling, Disraeli realized that the English were at heart Conservatives not because they were opposed to all change, but because they thought that change must be the result of a vital necessity. It is stupid to destroy old institutions because one feels that one has found better ones. Let the two grow together. The better ones will silently eliminate those of lesser value. Pragmatism is the only test of superiority. In fact, all well-bred people are Conservatives. Why? Because they know the force of history, the laws of growth and the significance of form. Conservatism is, in brief, the philosophy of a highly cultured people or race. Disraeli knew all this and so was a conscious and deliberate Conservative. But he was aware of forces and tendencies that other members of his party had not even dreamed of. A State, however powerful, was not, he thought, an immovable machine but a living organism. It must develop. There were abuses in England. Well, these must be removed. He had not the least hesitation in appropriating the programme of the Liberal Party. He wrote in *Sybil* or *The Two Nations*: "That we may live to see England once more possess a free Monarchy, and a privileged and prosperous people, is my prayer, that these great consequences can only be brought about by the energy and devotion of our Youth is my persuasion. We live in an age when to be young and to be indifferent can be no longer synonymous. We must prepare for the coming hour. The claims of the future are represented by suffering millions, and the Youth of a Nation are the Trustees of Posterity. For himself, he prepared for the coming hour."

Not only he bettered the lot of the common man—whose friend he ever remained—but he dreamed high dreams for England. When he learnt accidentally at a dinner that the Khedive, being short of money, was anxious to pledge his 177,000 shares in the Suez Canal, he at once acted on his own initiative. By borrowing the money—nearly four millions sterling!—from the firm of Rothschild he acquired the Khedive's holding. He had secured the highway to India. This was a stroke of imaginative statesmanship.

The Queen was delighted. Never had Disraeli seen her so pleased, she kept him to dinner—nothing but smile and infinite *agaceries*. "What particularly appealed to the Faery—so Disraeli used to call her—was the thought of the fury of Bismarck, who, insolent man, had declared only a short while ago that England had ceased to be a political force."

Not satisfied with this triumph, the Queen suddenly demanded the title of Empress of India. Disraeli had supported the idea earlier but now, in 1875, it seemed to him inopportune. The notion, he knew, was un-English and would be attributed to his taste for Oriental tinsel. So he counselled patience. But the Queen was determined to have what she wanted. Disraeli bowed to her wishes, and a Bill was brought forward. The public outcry was great, but Disraeli reassured everyone. He even began to talk of the golden age of the Antonines.

Was this play-acting? No, Disraeli had long had his own ideas about the Empire. He had always thought that England could not be considered apart from her Colonies. Twenty years earlier he had advised Lord Derby to grant representation to the

Colonies and to create an Imperial Parliament. Forty years earlier he had spoken in rhymed numbers of Federal Power and the Spirit of the Future. He had no patience with those who thought of the Empire only in terms of £ s d. Political and psychological considerations, he insisted again and again, were what decided the fate of a nation. England was nothing if not the metropolis of a vast Empire. For the organization of the latter he had a programme: colonial autonomy accompanied by an Imperial Customs tariff, a Crown right over unoccupied territories, a military *entente*, and, lastly, the creation of an Imperial Parliament in London. This was too bold and novel a policy for his day, but he never ceased to uphold it. Had he been living today he would almost certainly have approved of the conception of a Commonwealth—free and equal nations united by the ties of interest, understanding and affection.

Disraeli was in many ways ahead of his times. He tried to refashion England, tried to give her an intellectual and romantic ideal. He did not quite succeed. Never mind. All was not failure. He had infected some with his ideas. That was enough. For himself, in old age, little remained to cling to. He saw through many things. Words no longer intoxicated him: he sought far beneath them for the real and more and more did he find truth in individualism. After all, what had been the most precious experience of his life? That things are stronger than ourselves: that the greatest genius is but a straw in the wind: that all idealisms are doomed to pass away. But something mattered, mattered infinitely. What was it? That he had loved and been loved: that friends had been loyal: that he had tried to serve England. These things were the only reality. The rest was sound and fury signifying nothing.

So thought Disraeli in the solitude of Hughenden. The dandy who wished to astonish the world was finishing up as a philosopher. Flowers, youthful faces and music were his final consolations. Here we have the fulfilment of a noble destiny.

HINDU NUMERALS*

BY C. A. KINCAID, C.V.O., I.C.S. (RTD)

THERE is a widespread belief in England and a still more widely spread belief in France that the figures used today in Europe came from Arabia. They are commonly called Arabic numerals and *chiffres arabes*. This belief appears to be erroneous. The valuable article in *Dictionnaire des antiquités grecques et romaines* shows that our modern figures came from India and were adopted by the Romans shortly after the Christian era and their effective occupation of Egypt. Indeed, it is sufficient to compare Arab and Hindu numerals with our own to see from which ours came—e.g.,

European	1	2	3	4	5	6	7	8	9	10
Arabic	١	٢	٣	٤	٥	٦	٧	٨	٩	١٠
Hindu	१	२	३	४	५	६	७	८	९	१०

There is no doubt a certain resemblance between Arab and European figures, but that is not to be wondered at, since they both came from a common source in India.

Unfortunately, the Romans adopted Hindu figures too soon. The Hindus had not

* Mr Seddon, M.A., I.C.S. (RTD), formerly reader in Persian and Marathi at Oxford, has kindly looked through this paper at my request.

invented the zero when the two nations first met in Egypt. The Hindus discovered the zero about the third century A.D., but by that time the Romans had made the other Indian numerals their own and did not adopt the 0 for several centuries.

Although the Romans copied the Hindu numerals they deformed them in the process. Here are their figures, as given by Boethius in his manual of arithmetic that has survived. Boethius was killed in A.D. 525

1 2 3 4 5 6 7 8 9
 / 2 4 β γ 6 ~ 8 6

Still, we can see in these deformed figures—e.g. 1, 2, 6, 7 and 8—the ancestors of our present numerals. Strangely enough the Romans gave to each of these new figures a separate name—e.g., 1 *ign*, 2 *Andras*, 3 *Ormis*, 4 *Arbas*, 5 *Quimas*, 6 *Caltis*, 7 *Zenis*, 8 *Temenias*, 9 *Calentis*.

The Greeks seem to have kept their numerals unchanged until after the fall of Constantinople. As is well known, they were merely the twenty-four letters of the alphabet plus three disused letters. To the letters were added marks above and below, and finally an *M* to differentiate their values—e.g.,

α' = 1 α = 1000 $\frac{\alpha}{M} = 10,000$

If the Hindus, Romans and Greeks had no zero, how could they work out multiplication sums? The Romans and Greeks did them by the use of the Pythagorean abax (*αβαξ*), called by the Romans the *mensa Pythagorea*. Boethius gives the abax as under. The example given by him was 4,600 multiplied by 23. I have substituted for him a simpler sum and have done it in modern numerals to avoid confusion.

1,000	100	10	1	24 × 25
		2		(5 × 4)
	1	8		(5 × 20)
	4			(20 × 4)
	6			(20 × 20)
				= 600

N.B.—As the figures in 10 column amount to 100 the total is omitted and 1 carried forward.

It seems certain that the Indians were using this abax after Alexander's invasion but they must, I think, although there is no evidence on this point, have been using it before. I should be inclined to hold that they probably invented it. The Greeks claim that Pythagoras, who lived in the sixth century B.C., discovered it, but he was a great traveller and was reported to have visited India and Egypt. He may well have brought the abax back with him from his travels. Æsop, who was his contemporary, undoubtedly got his fables from India. For centuries before Alexander's invasion the Hindus had been trading on a big scale. There was also a great university at Takshasila (the Greek Taxila), where mathematics and science were taught as the Hindus had then no zero, the *mensa Pythagorea* or some such contrivance was necessary for mercantile and mathematical calculations.

As might be expected in a land where the zero was born, India still produces gifted mathematicians. Among my own Indian friends were two wranglers, the first, Mr. Paranjpe, was senior wrangler at Cambridge, the second the late Mr. Balak Ram, was perhaps even more remarkable. He took his degree in Lahore University in English literature and did not take up mathematics seriously until he went to Cambridge, there he graduated as fourth wrangler.

The Indian method of doing compound addition is definitely superior to our

own * Like ourselves, they have no decimal coinage but make up for it by the use of fractions. I give a simple example. The perpendicular lines stand for quarters and the horizontal lines for units.

₹	annas:	pies:
1	16	6
2	4	0
5	8	1
<hr/>		
9	11	7

₹.	annas	pies.
1	111 ≡	11
2	1	0
1	11	-
<hr/>		
0	11 ≡	11-

Naturally, all Hindus are not first-class mathematicians, but I have never met a high-caste Indian who was not a good arithmetician. This is mainly due to the fact that in the Deccan, at any rate Brahman and Prabhu boys, helped by a prodigious memory learn their tables up to 24×24 . French boys only learn theirs owing to their decimal system, up to 10×10 . The result is that although the French are the most mathematically gifted of any European people a French boy if asked what 11×12 amounts to will beg for a pencil and paper on the other hand, a Brahman boy in Maharashtra will when asked what 23×24 amounts to give the correct answer without a moment's hesitation.

POST WAR PLANS FOR INDIAN STATES

BY A SPECIAL CORRESPONDENT

In preceding articles it was urged that while, in a political sense, Indian Federation is deferred indefinitely economic planning on a federal basis remained possible as well as desirable, and that the reconstruction plans now under the consideration of the Government of India should be so moulded as to bring every State, as well as every Province, within their scope. This is now official policy. In its report just issued the Reconstruction Committee of the Government of India emphasize that "It is desirable that departments of the Central Government and each Province and State (of a suitable size) should now prepare a definite plan for post war development over the whole range of subjects including finance. This plan should be in detail for a period

* The superiority is more noticeable in bigger sums. The Englishman has then to divide a large number of annas by 16, whereas the Indian, having already divided the total into quarters, has only to divide them by 4.

of five years, but there should also be a long-term plan which may extend over a period of as much as twenty-five years or longer in such subjects as education, health, roads, etc. By way perhaps of stimulating prompt compliance with this injunction, the Committee add that "For the purpose of planning, it may be assumed that hostilities in the Eastern theatre might cease by the end of 1945 and that it would be possible to begin development over the whole field early in 1946. Inasmuch as implementation of such plans will begin almost immediately after the cessation of hostilities, it is certain that any State or Province which fails to conform to this timetable will thereby prejudice its own material interests."

In his Budget memorandum for the year ending October, 1945, the Finance Member for Hyderabad State Mr Ghulam Mohammed C I S, who is maintaining in every respect the sound financial traditions and procedures established by the late Sir Akbar Hydari, observes truly that Co-ordination of effort, pooling of all knowledge and ideas, and avoidance of overlapping are imperative in the common interest. In the Indian States there is considerable dependence on the good offices of the Government of India, not only in the matter of obtaining technical advice and guidance from foreign experts which the various departments of the Government of India propose to employ, but also in the matter of obtaining priorities for machinery and plant, and of facilities for training young men abroad to man new industries and carry on the ambitious programme of agricultural and industrial development. Urging that industries in India should be dispersed over wider areas than hitherto, the Finance Member remarks "This consideration is of particular importance to Hyderabad, which, though industrially backward is endowed by Nature with raw materials, mineral resources and sources for generating power and supplying water for irrigation, and therefore needs all the encouragement and facilities for evolving out her economic future for the good of Hyderabad and ultimately for the good of the country as a whole. Post war Planning Committees have prepared reports covering all important phases of future development and these documents are under active examination. The faithful ally of the Crown is also becoming not less acceptably, the faithful ally of modern progress and all this signifies in terms of economic advancement and social welfare."

Mysore, too continues, as always, along the same broad road missing no opportunities that arise to put its great natural resources to more profitable account. The area under mulberry cultivation, which was 30 000 acres in 1939 is now 70,000 acres—representing, one hopes, an expansion which has come to stay. Mysore industrial concerns have fulfilled war orders valued at over £7½ millions. In industrial undertakings, other than railways and electricity works, the State has invested nearly 360 lakhs and in railways about 700 lakhs of rupees. The success and proved indispensability of the pioneer State hydro-electric power works are constant incentives to embark on extensions. The current shortage of coal in India, so inimical to transport as well as industry at present affords an additional stimulus. At Jog in the north western corner of the State, a giant electric station is arising which in its final stage will develop 128,000 h.p., sufficient, as explained by a Mysore official to run 128 locomotives every minute of the day, or 26 huge cotton mills night and day, or to light up 32 towns like Bangalore. As the Minister for Public Works recently reminded the Legislative Assembly "By developing every such scheme to its fullest possible extent we will have a network of hydro-electric schemes, and the day will not be far off when all these will materialize."

India needs a similar development of hydro-electric power in every State and Province, and the new Planning and Development Department of the Government of India is hoping, without avoidable delay when peace enables a return to normal production to transform that aspiration into a living throbbing reality.

BRITAIN JOINS HANDS WITH HER EMPIRE TO HELP THEIR FIGHTING MEN

Now as victory draws near and we review the vicissitudes of the past five years, it is to this steadfast singleness of purpose we can trace the determination that brought us through the nightmare onslaughts of the Battle of Britain to the approaching dawn of a victorious peace. And we do not forget that we owe our liberation from the threat of enslavement to the quiet heroism and dogged determination of our fighting forces who have sacrificed their lives that their fellows may live as free men.

But they did not fight alone. On the home front their efforts have been backed with equal devotion by the men and women who have worked untiringly to provide them with the munitions of war, or to alleviate the hardships they have borne so uncomplainingly. Ever since the outbreak of hostilities, the Red Cross and St John and the Women's Voluntary Services have striven unremittingly to lighten this burden and their membership extends from the mother country to the farthest reaches of her great empire.

Of these services one of the most enterprising is run from the Red Cross Comforts Depot under the direction of Mrs Angela Latham. In 1939 Mrs Latham founded knitting parties in India, under Mr Odling of Kalimpong who got the hillmen to make seaboot stockings and sheepskin jerkins for distribution amongst Indian sailors and civilians through the India Comforts League. Thinking that pilots in the India Squadrons of the R.A.F. might appreciate similar garments Mrs Latham contacted Mr Goodchild of the India Office who immediately asked her to mother one after another of the most active squadrons. Since then Mrs Latham's helpers have sent an unceasing stream of comforts—gauntlets, stockings, waistcoats, socks—to meet the enthusiastic demands of their ever increasing squadrons. Moreover personal contact is made with all of the pilots who request her assistance for their men and as a sign of their appreciation, the Squadron Leader of the Baroda Squadron recently sent Mrs Latham the badge of their mongoose, with thanks and compliments for all that you have done for the squadron.

Mrs Latham herself modestly deprecates any tribute to her own efforts and praises the devotion of her volunteers, who are now mostly over seventy. One lady of eighty she says has made a pair of gauntlets for every day of war and although the waistcoats are most complex and professional to make she learned how to do them this month and made twelve because we need them so much. Mrs Latham goes on: Since 1939 I have made and collected over a million garments and seen they got to the right people—from blitzed to A.T.S. from admirals to stokers and from generals to despatch riders, not to mention the R.A.F.

Daily letters of thanks pour in from the grateful recipients of these garments and are sent out to the Indian donors of the planes flown by the men. The feelings of these pilots are perhaps best realized from a representative extract from a letter written by the Squadron Leader of the Punjab Squadron:

I can assure you that these articles, especially the coats are very much sought after by the pilots. The squadron is in great heart, and the fact that there are people so ready to work making such comforts for us does help us along in the job to which we have set our hand.

N G

ASIA PRESENTED

By WINIFRED HOLMES

(The author here continues her survey of how the affairs of the Asiatic continent are being presented on the air and the screen)

I—ASIA ON THE AIR

Is Mr Gandhi's statement that the Viceroy of India is the greatest autocrat in the world true? Mr E P Moon, late Punjab Civil Service in a week's five-minute a day series of talks on *How India is Governed*, told General Forces listeners that it is not so. The Viceroy is answerable direct to the Secretary of State and through him to Parliament, and therefore his controls finally are democratic.

To those who know something of the structure of the Government of India this is elementary knowledge. But many British people—who are (at least in theory) responsible for the way in which India is ruled—know little or nothing of the complicated system which has been evolved during the last century and a half. Certainly the average British Tommy finding himself in India to fight the Japanese, has only the vaguest idea, possibly much distorted by the loud and conflicting shouts of political factions. This short series of explanatory talks must have helped to dispel ignorance and provide an antidote to the distortions. It was a model of crisp, precise statement, with a leaven of personal experience and opinion to humanize the bare facts.

The Central Government, headed by the Viceroy which is responsible for Defence, Currency, Tariffs and Foreign Policy, means little to the vast mass of the Indian people, said Mr Moon. It is the Provincial Government which directly impinges on their lives and in particular the District Officer, who represents in living human terms the voice of authority, the magic stroke of a pen which will redress their wrongs and solve their problems. In being accessible to his people, especially to the humble and illiterate, the District Officer is directly carrying on the ancient Indian tradition of the *dharma* of the ruler, as laid down in the *Arthashastra* some two thousand years ago. The king must be accessible to his subjects at any time of the day or night to dispense justice and settle disputes.

This tradition suits India, and there have been many wise and admirable District Officers, much beloved and respected by their flock. But, according to Mr Moon, the growth of sophistication and lawyerdom and the multiplication of forms and instructions from above are rapidly changing the District Officer from a personal friend and ruler into a distant official buried in files, who has to work through the arid medium of pens and paper instead of the hearts and minds of men.

This fossilization of the District Officer is dealt with in greater detail in the speaker's book *Strangers in India*, in which his hero (the book is evidently autobiographical) resigned his Government service in 1938 convinced that he personally could do no further good in India.

Curiously enough, this situation is paralleled in the last century as seen in a recent talk in the Home Service, in which E. M. Forster described William Arnold's book *Oakfield or Fellowship in the East*, an uninspired but sincere autobiographical novel by Matthew Arnold's younger brother, William Arnold. He went out to India first as a soldier, changed to the civil service, and became Assistant Commissioner to the Punjab and finally Director of Education there in 1853.

The hero of the book, Oakfield, is beset by the same moral problem of the serious and conscientious young Englishman in India described in Mr Moon's book. Have I any right to be here? Am I really helping this people? Is my rule benefiting this country?

E. M. Forster describes Oakfield Arnold's arrival in Calcutta fresh from England. He was full of enthusiasm and the desire to serve, but he gets no pleasure out of India, except for the initial thrill of tropical scenery. The fault is not India's, but

the hero's, who can find no key to unlock the mysterious door of an alien people's heart. He works hard at languages but gains no understanding of native life, which he regards with a sort of resentful despair. Until the point of divergence between Eastern and Western mentality has been discovered, he says co-operation is impossible. And though Christianity may be true to preach it to India is to begin at the wrong end."

Just before he dies, at the age of thirty-one, he says bitterly: Must I go on patiently taking a bushel of falsehood for a grain of truth, casting my bread upon the waters, resume my work in India? No, I cannot do it.

But Arnold or his hero Oakfield, did not fail—except perhaps in results. He brought the great qualities of goodwill of sincerity and honesty to the country he came out to help and rule, qualities which are truly appreciated in India where generosity and personal loyalty are real virtues. Among a people whose own philosophy bids them in works be true office, in fruits let it never be, such men as William Arnold, for all their apparent failure and their self-mistrust, leave behind them a legacy of true endeavour and friendship which India will never forget.

The small Portuguese colony of Macao, occupying the tip of Chung-Shan, the large island at the mouth of the Pearl River flowing out of Canton was the subject of a delightfully descriptive talk by Richard Curle. It has been in Portuguese occupation since 1547 and its cobbled streets and red roofs are redolent of the Middle Ages. As you looked down upon their winding narrowness it was bare footed friars you expected to see not Chinese coolies.

But in spite of its medieval European appearance Macao's prosperity was due to the fact that it was the playground for Southern China. A sort of perpetual carnival reigned there horse and dog racing dance halls lotteries cheap liquor and above all, gambling which never ceased intricate teeming and intense. Outwardly all was decorous as became those who took their pleasure seriously and even the Chinese gambling at fan tan or dice, while they nibbled melon seeds kept their emotions in restraint. But the chatter of the onlookers and strollers filled the rooms with that kind of harsh twitter which spoken Cantonese suggests to the European.

Apart from the entertainment industry the people of Macao lived chiefly by fishing and making fireworks. It will be interesting to see what difference Japanese occupation will have made to this strange mixed city.

II—ASIA AND THE CINEMA

In "Adventures in Bokhara" at the Tatler the Russian cinema has given us delicious entertainment—an eighteenth-century fantasy in the style of the Arabian Nights made in Asia by Asiatic technicians and an Asiatic director and with an entirely Asiatic cast. The difference between this breath of authenticity and the Hollywood made Hollywood-starred film of China, *Dragon Seed* is the difference between bad showy ersatz and the real genuine article.

Russia is an Asiatic power as well as a great European one and this film although entirely free from propaganda, shows this. The story is a typically Eastern one. In Bokhara there reigns a tyrannical and black-bearded Emir whose ministers extort from his subjects until they groan under the strain and to whom freedom of the subject is unthinkable. To the city comes one day Nasreddin a round faced, smiling good natured fellow under whose air of frank joviality a sly mischief and Robin Hood quixotism hide. He is the kind of hero beloved in the East—the hero of a thousand and one stories the poor man who gets the better of the rich and powerful through a mixture of effrontery, cunning and wit, who succours the poor and rescues the fair damsel in distress.

The fair damsel in this case is the beautiful daughter of the city's potter, who is first to be married to the crooked old moneylender to whom her father is in debt, and then is carried off in true swashbuckling fashion to be the new bright star in the Emir's harem.

Nasreddin who of course has fallen in love with her at sight (a fleeting first sight of flashing dark eyes out of the corner of a coquettish veil) saves her from the attentions of the old usurer by tricking him cleverly—first selling him some worthless

goods and then paying him the potter's debt with his own money!—and then by a series of incredible and high-spirited adventures rescues her from the harem and makes the Emir condemn himself to death out of his own mouth. He is adored by the populace of Bokhara, largely because he makes them laugh—the laugh always being on the tyrants and pompous rich of the city.

There is real wit in the dialogue. Nasreddin finds the usurer struggling in a shallow tank thinking he is about to drown. The onlookers say they will save him if he promises to give them money, but he remains in the middle of the tank screaming for help. Nasreddin takes out of his clothes a coin and, holding it out enticingly at the edge of the tank calls out: "Come, friend here is money for you." The moneylender immediately loses his hysteria and hurries to the edge of the tank, holding out his hand for the coin. Nasreddin laughs and says: "If you want a rich man to come to you, never ask him for money—offer him some instead!"

So much for the real Asia—or rather the real Asia of the story teller. Now for Asia as seen by Western eyes. Three editions of *The World in Action*—a comparatively new programme of the March of Time variety—concerns Asia. They are *Fortress Japan*, *Asia Speaks* and *Global Air Routes*. All have been made in Canada by the Canadian National Film Board under the direction of John Grier son, pioneer of English documentary films.

Although the commentaries of these films are perhaps too much suggestive of high-powered sales talk for British audiences, the material and construction of the films are of extreme interest. Compiled from news-reel and other shots, including some captured enemy material, the films will help to bring the war in Asia home to audiences here who tend to be interested mainly in the European struggle.

Fortress Japan is based on the conception clearly shown by diagrams, of Japan sending out tentacles—east, west, north, south—to grab territory and raw materials to build up an immense war economy. In this way she acquires the second largest empire in the world. She enslaves the conquered people, forcing them to produce and produce and produce in the shortest possible time raw materials, goods, food, to send back to the motherland.

But after the initial shock and retreat the Allies start to push them back. First come the attacks on the Pacific islands which protect the far flung Japanese supply lines. Then come the large attacks on the Gilbert and Marshall Islands, springboards to Tokyo. Then the second highway of attack—the establishment of the American bomber stations on the Aleutians. Then the attack of the British from India and Burma and the struggles of the Chinese Republic to keep the invaders at bay.

Japan is now facing a new strategic situation. She is closing in on her inner fortress, which she rings with the most powerful fleet she can muster. And that inner fortress is not merely the islands of Japan themselves, but Manchuria and Southern China—the great industrial reserve of Japan—which she must keep at all costs.

Asia Speaks is a film essay on the propaganda cry of the Japanese, *Asia for the Asiatics*. It is a less convincing film than *Fortress Japan*, but has some interesting sequences. One is from a captured Japanese film and shows the new ingratiating attitude of the Celestial Herrenvolk towards their enslaved peoples—an attitude designed to keep them as satellites and friends should Japan lose the military battles to come.

Of these three films *Global Air Routes*, though it does not deal primarily with Asia is the most important. In the new age of the air which will dawn after this war is over the old flat map of the world will be discarded for the round map of the airman. In this map Asia is nearer to the United States than is the Argentine, and for some years now the development of flying has pushed habitation and civilization nearer and nearer the North Pole—from Canada and Russia.

As nine-tenths of the world's populations live in the northern half of the world the new aerial trade routes of the world will go right across the polar regions, linking Teheran, Baghdad, Karachi with Great Britain and America. What results this will have in Asia remain to be seen, but the global map and pre-war flying experiments point to the shape of things to come—a busy air highway across the North Pole linking Asia with the New World in a few flight hours.

THE CHINA FRONT

BY CHING-CHUN WANG, PH.D., LL.D

(Former Director-General of the Chinese Eastern Railway, author of
Japan's Continental Adventure, etc.)

THE Allies have been victorious everywhere except on the China Front, where the Chinese forces have suffered some important reverses since early summer. It is therefore, timely to examine the China Front and some of the causes of these reverses. In this world wide conflict, China was the first nation to take up arms against aggression, although she was the least prepared to fight a modern war. China did not compromise because she was convinced of the righteousness of her cause and had confidence that the peace-loving nations will not let her down. For over seven years China has been fighting one of the greatest military Powers. Despite her terrible wounds and her hopeless situation she has repeatedly refused Japan's tempting overtures for collaboration which, during those critical years of 1940-42, would have dangerously affected the whole world situation. Besides inflicting serious damage on Japan's striking power China has immobilized about 2,000,000 Japanese soldiers,* which Japan sorely needs for other fronts, thus buying time for the Allied counter offensive.

But China has had to pay a terrible price. After a few months of hostilities which began in July 1937, the flower of her army was destroyed. Her capital was sacked and her Government had to flee from place to place. Her cities have been repeatedly bombed without having the means to defend themselves or to hit back. Most of her fertile provinces and industrial centres are lost. Almost all her railways and river communications are in enemy hands. For over four and a half years China had to face a ruthless enemy at incredible odds and alone.

Pearl Harbour brought to China her long wished for allies but not relief. On the contrary by the capture of Hong Kong and Singapore the enemy intensified the blockade, and the fall of Burma cut China's life line. Ever since those fateful days of 1941 China has been completely isolated and supplies from abroad have been limited to those flown over the hazardous Himalayas. As free China is not self sufficient even in the necessities of life and industry in the area is negligible, China's difficulties in facing a formidable foe like Japan must be apparent. To the ravages of war famine and flood have been added the horrors of hunger and starvation. For years the sufferings of her people and of her soldiers have been appalling and unparalleled.

After seven and a half awful years of war at such odds, China is very much like an amateur boxer who has fought Joe Louis not 15 but 150 rounds. For at the outbreak of hostilities the most sanguine hopes were that she should not collapse within six months so as to give her friends sufficient time to come to her rescue. There fore we must be grateful to Providence that she is still on her feet eager to fight on. But she is full of shocking wounds and feels many horrible pains. Like the amateur boxer, after such a long cruel ordeal China's very appearance must look frightful and her every movement may cause anxiety. But these very unpleasant symptoms are the results of her extraordinary efforts to play her part for the common cause and must serve as a reminder of her urgent need for supplies. For may it not be recalled that under the inspiring leadership of Generalissimo Chiang Kai shek, China had made more rapid progress during the years 1930-37 than in the previous one hundred years, and that China was enjoying an increasingly high degree of prosperity during those seven years despite Japan's interference. Moreover through her terrible ordeals China has gained new strength and to-day she is facing the invader, as observed

* Estimates of the Office of War Information in Washington put the number of the Japanese Army at over 4,000,000, of whom 2,000,000 are in China—*Vide Evening Standard* December 1, 1944

General Patrick Hurley, like a wounded tiger determined to fight to the end. Therefore, is it not advantageous for her friends to lay less stress upon her discomfitures and do more to meet her urgent needs.

The Allied help to China, most highly appreciated though it is, unfortunately has been extremely limited, for up to the end of June this year less than 2 per cent. of lend lease exports have trickled into China. The actual tonnage of Allied supplies afforded to the Chinese armies in East China would not be sufficient to keep a single British or American division in combat. The efforts of the American airmen who fly over the hazardous Himalayas to bring supplies to China are beyond all praise and the tonnage delivered over the Hump have passed all expectations. But the unfortunate fact remains that the material help is far from being sufficient.

By their extraordinary valour and skill General Chennault's airmen have performed miracles. The Allies in general, and China in particular, are deeply indebted to these brave men. But here again the excellent quality is robbed of its proper reward by being too little, for reports show that the total Allied air strength in East China is so small that it would hardly be believed if it could be disclosed.

Moreover, most of the Allied supplies have been allocated to the Chinese forces fighting on the Salween Front, where several Chinese divisions have been fighting shoulder to shoulder with the Allies in the successful Burma campaign. The terrible shortage of supplies and the diversion of some 100,000 of her veterans to the Burma Front at the most critical period of the East China fighting together with the redoubled efforts of the enemy in sending about twenty divisions from Manchuria to China have been the immediate causes of China's recent reverses.

Of course inflation and the general weakened condition of the country have also contributed to China's recent reverses but those causes themselves are the result of the long blockade and the terrible lack of supplies. Once reasonable quantities of supplies reach China most of these causes of weakness could be removed. This is clearly shown by the fact that the mere announcement of the coming completion of the Ledo Road has already steadied prices to a considerable extent.

After seven and a half years of war and blockade the Chinese army is short of everything. As reported by many observers, some of the best Chinese troops are only armed with rifles and bayonets. It should not be difficult for us in this country to appreciate the tremendous odds of the Chinese troops who with such simple arms have to face the well-equipped Japanese mechanized divisions. In fact most battles in China have to be fought on the Arnhem model where the Chinese soldier has to bear grimly the punishment by the enemy's superior weapons and wait for the chance to use his rifle and bayonet at close quarters.

Despite the miserable lack of equipment the defenders of Changsha and Hengyang have inflicted heavy losses on the enemy by putting up a resistance comparable with the defence of any other place against similar odds during this war. With no heavy equipment to speak of both garrisons fought to the end. No quarter was given or accepted. There were no prisoners on either side. Over two-thirds of the garrisons were killed or seriously wounded. The remnants had to retreat because ammunition and food ran out. When the full story of the battles of Changsha and Hengyang becomes known, we feel certain that the sacrifices and heroism of the defenders of the two places will rank no less glorious than those of the brave men at Dunkirk or Arnhem or any other place in this war.

We hear little of the bloody battles in China or her appeals for supplies because the great victories and other exciting news nearer home often crowd out the China Front from the air and the Press. It may also be observed that it is only in China that the Japanese soldier has never been reported as being different from any other soldier, while there is no reason to believe that the Jap in China fights less fanatically than elsewhere. In taking Myitkyna after trekking hundreds of miles through the jungle of North Burma, the Sino-American divisions have proved beyond any doubt the fighting qualities of the Chinese soldier. Therefore all that is needed to save and improve the situation in the East is equipment.

The principal cause for anxiety is that there is not sufficient improvement of the supply situation. Despite the cruel lessons of Pearl Harbour, Malaya, New Guinea, East Indies and Burma, and the enormous difficulties experienced in reconquering

the bits of islands during the last three years by the use of some of the best naval, air and land forces led by some of the ablest generals and admirals, there still remains the mistaken idea of underestimating the importance of the China Front. As such mistaken notions of the Japanese menace in the beginning had brought on this terrible war, so it is feared that the continued mistaken notion of the Far East would unnecessarily prolong the war with the serious risk of losing the peace for the peace-loving nations. For, as the Chinese proverb says, 'When the nights are long the dreams will be many'. In other words, if the habit of 'too little and too late' regarding the Far East be continued too long, unforeseen complications may yet arise.

But the problem is not too difficult. As President Roosevelt has well pointed out, it is the lack of a port of entry that is largely responsible for the deplorable supply situation. With the liquidation of the German navy and the addition of the Italian and French fleets, the Allied naval and land forces would seem to be sufficient to liberate Burma in short order. Even if the Japanese navy should venture to come out to the Indian Ocean—which is not likely—it would be at a great disadvantage while Admiral Nimitz is pressing on so hard from the East. Once Rangoon is recaptured, not one but several Burma Roads and a railway could be quickly built, and whole Free China would be given new life and new strength to do its part.

In a desperate war, as this is, no supply could be brought to any place without risk. If risk were the ruling consideration, neither the supplies to Russia nor those to this country could ever have reached their destinations in time to enable the two great Allies to contribute their glorious part. This global war has clearly shown that it is only by the generous and timely help of friends that each ally has been enabled to withstand the onslaughts of the enemy. If left alone no Allied nation in Asia or Europe could have survived. As Mr. Walter Lippmann has well observed, had Great Britain and Russia been neglected as badly as the Far East the war in Europe would have been over long ago.

As the war draws to its closing stages and in order to ensure lasting peace there is an ever growing need among the Allies for mutual appreciation of each other's difficulties as well as a continued eagerness to rush help to wherever it is most urgently needed. It was by such timely help to Great Britain and Russia that the situation in the West has been saved since 1941. It is also by similar efforts that the situation in the East may be improved. Should there be failure in these efforts then the policy of winning the European war first would go down in history as a huge joke.

Despite great losses, the Japanese navy is still powerful and is waiting to strike at the most advantageous moment. Nearby naval and air bases and intimate knowledge of local conditions are all in Japan's favour. When naval battles are fought under such conditions it is possible that bad luck or other unforeseen circumstances might bring about setbacks to the Allies. The safest and most effective way to liquidate the Japanese navy seems to be to have a sufficient air force operating, at the same time, from bases in China that are near enough for the purpose. But to maintain such land bases the Chinese troops need better and more equipment.

Moreover, even after her navy is sunk Japan will still have about 4,000,000 well equipped troops. Therefore, the combined naval and air forces of Great Britain and the United States, most powerful as they are alone, may not be sufficient to make Japan surrender. What happened in New Guinea, Truk, Wake, Guam etc. must be sufficient to show that there must be sufficient land forces to bring about final victory. It must also be remembered that the Japanese Empire is about three times as large as the United Kingdom, and that for over ten years Japan has been making extensive war preparations in Manchuria and Jehol, an area about that of Germany, France and Italy combined. Since the beginning of 1943 Japan has also been fortifying strategic places in North China. All these facts clearly show that the cheapest way to defeat Japan is to take advantage of China's manpower by cutting through some adequate supply route soon. Further delay would be morally wrong and strategically harmful. While General MacArthur and Admiral Nimitz are battling their way from the east, it seems high time that Burma should be liberated without

the least delay, so that supplies may really pour into China through the back door and that Japan and her navy may be attacked from east and west.

In conclusion, it may be pointed out that the China Front means far more than the material fact of having prevented Japan from throwing its full strength, plus China's man-power, to overrun India and to invade Siberia during the critical years of 1940-42, for the China Front is built on the basis of the conflict of China's doctrine of an independent China working for world-wide co-operation against Japan's doctrine of a 'Co-prosperity Asia' under a strong Japan, and China's will to resist the designs of Japan, as *The Times* on November 3, 1944, observed has prevented the slogan 'Asia for the Asiatics' from sweeping unchecked across the Eastern world. To China it has been given, in the last seven critical years, to stand for co-operation between East and West in a world threatened by racial antagonism. May it not be pointed out that the only aims mentioned in the Chinese national anthem are to establish a democracy in China and to help bring about a commonwealth of nations in the world? Therefore, the results of China's efforts will either vindicate the Chinese doctrine of world co-operation in the Far East or the Japanese doctrine of Asia for the Asiatics.

MYSORE AND THE WAR

(SPECIALLY CONTRIBUTED)

UNDER the inspiration of the Maharaja and with the guidance of N. Madhava Rau the Dewan of the State, Mysore has been contributing to the general war effort to the fullest limit of its resources. In February 1940, shortly after the outbreak of hostilities, His late Highness the Maharaja made an appeal to his subjects to respond to any call made on them in the prosecution of the war and to help the cause of free dom by service or by money.

In addition to the gifts made from time to time by His Highness and his Government for purposes connected with the war, the people and the several industries of Mysore have played their part on a scale worthy of the State and of the Allied cause. The State has contributed so far Rs. 54.60 lakhs in aid of the war effort, of which the contributions from His Highness's Privy Purse and the Government alone amount to Rs. 44.25 lakhs.

The most important of these contributions are Rs. 1,33,333 to the Lord Mayor's Fund for the relief of air-raid victims in London, Rs. 8,33,731 for the purchase of air craft to form the Mysore Squadron of the Royal Air Force, Rs. 5,00,000 to His Excellency the Viceroy's War Purposes Fund in June 1941 for the welfare of the Indian troops, Rs. 6,50,000 in January 1942, for purposes relating to the Naval Defence of India, Rs. 1,00,000 to His Excellency the Viceroy's War Purposes Fund for the gift of a fighter plane named Mysore for the Indian Air Force, Rs. 25,000 to Her Excellency the Marchioness of Linlithgow's Red Cross Fund and Rs. 10,00,000 as a further contribution to His Excellency the Viceroy's War Purposes Fund. The Mysore Squadron of the Royal Air Force, towards the formation of which the State has made substantial contributions from time to time, has done very well indeed, thanks to its gallant personnel.

Government have invested a sum of Rs. 8.65 crores in the Government of India War Bonds. The Bank of Mysore has invested a sum of Rs. 12,66,500 in the 3 per cent. 1949-52 Defence Bonds.

A new series of 3 per cent. 1951-61 securities of the nominal value of Rs. 2 crores has been issued as a feeder to the Government of India Fourth Defence Loan. The loan has been issued purely as an anti-inflationary measure.

A Small Savings Scheme has been sanctioned, in co-ordination with the Government of India, to popularize the Post Office Twelve Years National Savings Certificates which provide to the poorer classes of people, in particular, a convenient and profitable means of investing small savings.

The services of the First Battalion of the Mysore Infantry were placed at the disposal of the Government of India at the outbreak of war. The offer was accepted, and the battalion was selected for service with His Majesty's forces overseas. Another battalion has also proceeded for active service. A complete battalion has been raised to take the place of the First Infantry Battalion, with a training company to keep it up to strength. In addition, the Third Battalion has been expanded from one company to a full I.S.P. battalion to provide for internal security duties, and a new unit called the Garrison Battalion, with headquarters and two companies, has also been raised. When the Defence Department expressed a desire to raise a transport company (51, Mysore Mechanical Transport Company) in the State, all facilities were afforded to them for the purpose and for the training of the men too. Generous concessions to the soldiers and their families have been accorded by the Government from time to time. The Mysore Soldiers Board has been evincing a keen interest in the welfare of the families of the soldiers on active service, and has made special grants in suitable cases to alleviate distress. The State is also actively co-operating with the Defence Department in regard to the recruitment and selection of suitable candidates for emergency commissions in the Indian States Forces.

An Act to provide for the constitution of the Civic Guards in the State has been passed. Enrolment is entirely on a voluntary basis and there are now over 2,600 Civic Guards, including group commanders, in the several districts of the State.

No account of Mysore's war effort can be complete without mention of the devoted work being done by the women of Mysore. The Women's Auxiliary Committee of the Mysore War Fund despatched in the past four years for the use of troops on active service over 150,000 articles comprising hospital and surgical and first-aid materials, and amenities for soldiers.

Apart from the Forest Department and the Department of Industries and Commerce, which have both taken up the execution of a large number of orders for the Supply Department of the Government of India, there are as many as twenty-six industrial concerns in the State engaged directly in the manufacture of war supplies. Of these, nine are State-owned, nine State-aided and eight private. The total value of war orders placed with these concerns from the outbreak of war up to date amounts to over 11 crores of rupees.

Special facilities have been provided for the training of war technicians, for harnessing various industries to war production and, generally, for transforming the State to war-time economy. The contribution of the State in the form of mobilization of man power has been no less striking.

His Highness the Maharaja performed the opening ceremony of the War Services Exhibition held in Bangalore in June 1943. His Highness paid a tribute to the organizers of the exhibition for the great service which they had been rendering for the country's war effort. About 500,000 spectators visited the exhibition in the course of eight days to witness the war equipment and displays by military personnel.

His Excellency the Viceroy during his visit to Mysore in August, 1943, visited the War Industries Exhibition arranged at the Exhibition Buildings. He was conducted round the exhibition by the Dewan and the Minister for Industries and Supplies, and was shown samples of war supplies made in the State. His Excellency was so impressed by the range of industries, textile, metallurgical and chemical, represented at the exhibition that he observed: "You do everything for yourselves in Mysore."

REVIEWS OF BOOKS

STRANGERS IN INDIA By Penderel Moon (*Faber and Faber Ltd.*) 7s. 6d. net
(Reviewed by SIR MALCOLM DARLING)

This is a remarkable first book. Official and Nationalist will both find plenty to cavil at, but anyone who appreciates good writing, sincerity and a fresh approach to a well-worn subject will enjoy it, and, if in India for the first time, will feel less of

a stranger for reading it. The "Strangers" are, of course, the British, and what they have done, or left undone, is explained and discussed by a number of characters, but mainly by three civilians—one of them, young and eager who finally retires disillusioned—another called Lightfoot, older and wiser, and, as he says, "too tangled up in the country to leave it, and the third, the author himself—really a case of three in one, for all three represent different aspects of the same mind. And a singularly sensitive and thoughtful mind it is.

The discussions turn on a number of India's major problems—for example, the poverty of the peasant, his reactions to our legal and political systems, the political embroglio, and the Englishman's rôle in the India of today—and consist of a series of rather one-sided conversations, varied by the more formal expositions in which the author reviews the past or comments on the present. It is an unusual technique, and the author has not entirely mastered its difficulties. Past and present get mixed up, and from time to time the reader is obliged to remind himself, and on one occasion is even reminded by the author (in a footnote), that the views expressed relate not to today but to some date in the past when conditions were different. Nor is it always clear how far some of the more disputable statements of opinion or fact made by one or other of the characters are endorsed by the author.

But these defects almost disappear in the life and style of the writing. Nothing for instance could be livelier or indeed more to the point than the description of the Moharrum celebrations at Nadlum (why such an obvious disguise?) The two leading tazias, offended by an official order, refuse to take part in the final procession when it is due to move out of the city. No. 3 says it can only move *as* No. 3. No. 4 says it can only move *as* No. 4, and so on right down the line. The procession is at a standstill, the crowd grows excited, a riot threatens. The police alternately cajole and browbeat No. 3 but its leader Pir Baksh is obstinate. Suddenly a message comes from far down the rear that Nos. 11 and 12—the Painters and Carpenters—are ready to take the lead. They have been negotiating for two tiny plots of land in the city and the bargain is not yet struck. They see their chance winks are exchanged with authority and down the line they come with tazias shoulder high. This is too much for No. 3, that 11 and 12 should get before them—the thought of such humiliation appalled them. With tears in his eyes Pir Baksh begs the Deputy Commissioner to let them go first. No, let him wait till last, exclaims the Police Inspector: he has given us trouble enough. But the Deputy Commissioner, more merciful, says: Let him wait a minute and follow on immediately behind these. But—and the rest of the story must be told in Mr. Moon's vigorous style—Pir Baksh was waiting for no one. Leaping in the air with delight he made a signal to his men and at once the miserable, measly Lal Khan tazia came hurrying down the slope scattering the crowd helter-skelter knocking down the City Magistrate who tried to bar the way barging past the Painters and Carpenters tazias till it got clear of everyone at the head of the procession. The crowd applauded.

The City Magistrate picked himself up out of the dust the mourners began beating their breasts. Everyone was happy. But happiness alas does not last long in India. Nos. 1 and 2 more offended than ever determined on revenge and a week later a communal riot broke out.

A chapter on the communal question follows acute but biased. Lightfoot is right when he says, "For years the communal conflict has been in essence a struggle between different sections of the middle classes for posts, but he is on much more doubtful ground when he adds that we are inhibited from promoting agreement by our subconscious adherence to the divide and rule principle and by our dislike of Congress. My own experience, for what it is worth, certainly does not endorse the former. Even more questionable is Lightfoot's further statement: 'We've promised India self-government, but we don't really want to relax our hold' (p. 111). That rings oddly in the light of the Cripps offer. True, it relates to some date before the offer was made, but not, it would seem, to before the grant of provincial autonomy, which was clearly a step in the direction of full self-government.

The whole book is tinged by a certain animus against British rule in India. Everyone knows, says Lightfoot, that to the people of India capitalists are better than the whips of foreigners' (p. 107). I must confess that I at least did not know

this, and I find it difficult to reconcile it with the author's very just observation that ruthless exploitation of the weak by the strong is still the rule in India (p. 194). There are other inconsistencies, inevitable perhaps in a book written with all the frankness and freshness of comparative youth—the author, we are told, is under forty—and so direct and personal in its approach. The approach is that of the district officer who knows and loves the village and who is jealous of all that may undermine its welfare. It is this that gives the book not only its special interest but also its importance, for it is the village that must condition India's future. There, indeed as the admirable chapter on the peasant and democracy shows, there is room for grave apprehension. I can confidently predict, says the shrewd Allah Dad, that if we persist with these democratic charms of elections and votings we will only get an utter deterioration of the administration mere ruins. I would call it of what exists today (p. 137).

In his final chapter Mr. Moon gives us his conclusions. These look a little thin after his trenchant exposure of our legal and political systems and the difficulties created by the war, and resolve themselves mainly into an indication of possible sources of danger and possible means of salvation. But who could do better? His most interesting suggestion is that in the backward obsolete States there perhaps lies the secret of India's future and her best hope (p. 196). His reasons for this with much else in this brilliant and provocative book I must leave the reader to discover for himself and if he is wise he will do what I did and read it twice.

CHINA AND BRITAIN By Sir John Pratt. (Collins) 8s 6d net

(Reviewed by EDWIN HAWARD)

This attractively illustrated contribution to a now famous series is marked by the author's gift for bringing his deep knowledge of China within the grasp of the lay man. He has humour with understanding and learning, with lightness of touch. The generous supply of coloured plates and black and white illustrations decorate the narrative as it tells the story of Sino-British relationships.

The seafaring traditions of the Chinese are appropriately recalled and we are reminded that although Chinese vessels never sailed the Atlantic or the Mediterranean the sea-borne trade between the countries bordering on the Indian Ocean and the China Sea in ancient times exceeded in volume the comparatively small traffic of the Mediterranean world. Travellers from Europe were always filled with amazement at the forests of masts and the miles of junks in Chinese ports. Those who have studied the construction of the Chinese junk, research to which Sir Frederick Maze's collection has made such valuable contribution are well aware that the Chinese ship-builder had a technique which, handed down from father to son without formal record, comprised features of its own and could give instruction to the more precise craftsmen of the West.

From navigators Sir John takes his reader to the botanists who have placed Europe under a heavy debt to the Chinese, as both Kew Gardens and St. John's College, Oxford will testify and botany brings us to tea and to the name of Robert Fortune, whose travels from Kew Gardens to China produced a notable book. Then there is China of the Great Wall, the China of Pottery and the Dragon. But behind all this is the civilization which today can claim to be the oldest living civilization of the world, a civilization which has seen all its contemporaries of thousands of years ago forgotten in the dust of the deserts covering their remains.

Chinese philosophy reached its peak with Confucius some 500 years B.C., and his teachings still live in Chinese polity today, particularly in the vigorous survival of the family tradition in which Sir John shows religion, philosophy, social organization, political theory and practice, all have their root.

To the charge that the Chinese political system ignores the Rule of Law Sir John points out that the Chinese answer is that in rejecting the Rule of Law for the nobler basis of the sense of moral obligation they have proved the superiority of their civilization. The Chinese mind does not accept the Western view that law is the

instrument for giving effect to the wishes of the dominant group or groups in the community. Chinese political theory gives no consideration to rights—at considers only obligations.

All this is unfolded pleasantly and authoritatively in the 127 pages of Sir John Pratt's charming chaplet to crown Sino-British friendship, a friendship based on many similarities as well as certain contrasts in the national spirit of the two peoples. By understanding in such matters can friendship alone succeed in weathering the stormy seas on which the world today is tossing.

THEY MADE INVASION POSSIBLE By Peggy Scott. (Hutchinson)

(Reviewed by WINIFRED HOLMES)

Women can't do this women can't do that! How ridiculous such a statement sounds today! Peggy Scott, who has studied and chronicled nearly every aspect of women's work during the war, gives us in this latest book of hers a fascinating portrait gallery of women who are proving triumphantly every day that they *can* do practically everything a man can do. And do it well.

Yet they aren't doing it to try and take the work away from the men. As the author wisely says in her introduction. Only women know what it has cost them to do the double job of working for their country and their families. Given a man's job, woman still has not his freedom to do it. It will be seen also that when the war is over the job will not be so much her concern as the home. The majority of girls are looking forward to running homes of their own, not to running a man's job for him.

But though the majority of women may still choose to run a home rather than do a full time skilled job—a man's job—they will always have the satisfying knowledge that they can do these jobs. And perhaps they will have taught men something too. Take Louisa, the chimney sweep of Walthamstow. She's always clean according to Miss Scott's description—a thumb-nail sketch of a real personality. And that's almost unheard of for a sweep, masculine gender.

In a lively and human way the three Women's Services are described by using individuals: their jobs, their speech, their points of view as examples of the whole. Photographs illustrate the text admirably. But the most fascinating part of the book is the second half, out of whose pages spring the lady plumbers, the butchers, the postwomen, the railway fitters, the riveters and the bus chippies to talk about their work and their lives.

Future historians will find *They Made Invasion Possible* a valuable record and present-day readers a pleasure.

SHARAF AL ZAMĀN TAHRIR MARVAZI ON CHINA, THE TURKS AND INDIA. Edited and translated by V. Minorosky (James G. Forlong fund vol. xxii) (Royal Asiatic Society) 15s net.

(Reviewed by A. S. TRITTON)

It is absurd for one man to try to review this book, the job requires a team. The core of the volume consists of the chapters on geography from an Arabic book of beasts by a doctor with translation and commentary: the stone and the fruit might be a better metaphor. The subject matter ranges in space from Constantinople to the eastern frontiers of China, and in time through several centuries. This book is arranged on the same lines as the Professor's earlier one, *Hudūd al-'Ālam* and is a kind of appendix to it. In addition to the main sections mentioned in the title, there are chapters on Ethiopia and the islands of the sea, which almost deserve the name of *Major Big-Talk's Stories*. Elsewhere the contents vary from details of geography through the manners and customs of the people to their religious beliefs and practices. The author chose those customs which were strange to his readers and in which

they might be expected to be interested. Thus, in China a foreigner may take a wife of the land, but if he leaves the country he cannot take her with him, though he may take the children. In some places there was a curfew at sunset, and anyone found outside his house after that hour had his head cut off. They had a system of old-age pensions. Women did not cover their hair. On the other hand, familiar habits are mentioned so as not to put the readers off by continuous novelties. Perhaps the most important thing in the book is the account of the migrations of the Turks across Asia and Europe. Professor Minoraky does his best to make the very dry bones of the brief Arabic statement live. To the student of Arabic literature, what catches the attention is the writers' habit of copying from their predecessors, the Professor tries to trace the lines of descent of the various stories and to fix the point at which and the source from which the information was first received. Thus Yahya the Bermaki was given a report on the religions of India this is traced through three lines of descent ending respectively in the *Fihrist* in *Bīrūnī*, and in the present work with a variant in *Shahrestānī's Religions and Sects*. In some passages the Professor has guessed at the meaning of the Arabic, he may have guessed right, but the dictionaries give him no support. The commentary might with advantage have been cut down, for some parts of it are a repetition of *Hudūd al 'Ālam*. In places the facts are so wrapped up in verbiage as to be hard to find, the Professor has changed his mind about the site of Tūsmat, but he cannot say straight out that his earlier proposal is wrong. There are far too many suppositions in the book. Ibn al Wahhāb was questioned about his travels when he was an old man, it is not impossible that immediately after his return from China when his memory was fresher he drew up a longer memorandum (for the caliph?) This is called book making. The proofs were read carelessly.

FAR EAST

CHINA IN BRITAIN By Barbara Whittingham Jones (*W H Allen*) 9d net

This timely work contains the first historical account of the various Chinese activities in this country and includes a comprehensive summary of the work of the Universities China Committee in London.

FICTION

TWILIGHT IN DELHI By Ahmed Ali (*The Hogarth Press*) 7s 6d net
(Reviewed by LADY FOWLE)

All true Indian cities are studies in contrast, great riches and great poverty, beauty and sordid horror, are seen side by side in their highways and bye-ways. The tiled and soaring loveliness of domes and minarets and the cracked naive cement walls that crumble into filthy gutters, the scent of jasmine and the sharp stink of sewage, the savoury smell of roasting kabobs (those appetizing morsels which taste of woodsmoke and which, if tender and rightly cooked, make a never-to-be-forgotten meal at the end of a hard day's desert travelling), and the musty cloying drifts of half-dead marigold flowers and of burning dung fuel—these and many more blend and mingle and sum up the essence of life in the towns and villages of India.

To the Oriental no aspect of life is "unsuitable", all are different sides of

the same gift from God, and, though some may be inconvenient or less pleasant than others, each has its appointed place, but to most Europeans the mixture of tawdry stuff with magnificent workmanship or the sudden forced negotiation of an open drain while admiring a building of great beauty and historical interest seem shocking and unnecessary.

In *Twilight in Delhi* the author writes of Mir Nihal's joy in the rhythm of the flight of his unbeatable pigeons and of his annoyance at his constipation with equal simplicity and directness. The pageantry of the 1911 Delhi Durbar is emphasized, but the difficulties of the small children who were kept waiting overlong for the procession are not forgotten, and so we are given a book which has the true stamp of the East—great interest in and tolerance of life as a whole. The English words themselves receive at times an Indian twist, Chang Yee, the Chinese painter, can take a scene that is typical of London—part of Hyde Park or the lake in St. James's Park, and depict it with perfect accuracy, but through Chinese eyes, and Ahmed Ali can take English words and charge them with Indian meaning. The translations of ancient Persian and Urdu songs and poetry reflect far more of their original form than does the Rubaiyat, which, in translation, is more of Fitzgerald than of Omar.

There are descriptions of almost unbearably sultry hot-weather nights and days that make one smell the hot dust that permeates into every crack; there are descriptions of faithful patient married love and of the shy advances of first lovers and of Indian spring nights, and there are strange old tales of alchemists and of beggars. The story of the life of Mir Nihal, his family and its ramifications, their friends and the friends of their friends, brings opportunities for descriptions of weddings, births and deaths and all the ceremonies which accompany these in a good Muslim household where purdah is observed. The date palm in the courtyard of the house overlooks their deep sorrows and their practical joking, the philosophic discussions of the men and the bickering and chattering and friendly gossip of the women, and when, at the end of the story, the sorrowful, half-paralyzed old man lies helpless mourning for his favourite son. On the bare top of the date palm sat a kite and shrilly cried for a while and flew away, leaving the trunk, ugly and dark, standing all alone against the sky.

This book is Delhi, but it is not the Delhi of the club and the polo ground or the Delhi of the Government or the Delhi that is New. It is the Delhi of those who accept all her aspects as a part of their life.

The views expressed in these pages must be taken as those of the individual contributors. THE ASIATIC REVIEW does not hold itself responsible for them.

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